

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NORTH DAKOTA**

Civil Action No. 1:24-cv-136

United States of America,

Plaintiff,

v.

Marathon Oil Company,

Defendant.

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**CONSENT DECREE**

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The United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), has filed a Complaint in this action against Defendant Marathon Oil Company (“Marathon”) concurrently with this Consent Decree. The Complaint alleges that Marathon violated the Clean Air Act (the “Act”) at its oil and natural gas production facilities within the boundaries of the Fort Berthold Indian Reservation (“FBIR”) in west-central North Dakota. The Complaint alleges two categories of violations:

- 1) The Complaint alleges Marathon violated design, operation, and maintenance violations under the FBIR (Mandan, Hidatsa and Arikara Nation) Federal Implementation Plan for Oil and Natural Gas Well Production Facilities set forth in 40 C.F.R. Part 49, Subpart K, and the Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution, 40 C.F.R. Part 60, Subparts OOOO and OOOOa.
- 2) The Complaint alleges violations of preconstruction permit requirements set forth in Part C of Title I of the Act, 42 U.S.C. §§ 7470-92, and its implementing regulations for Prevention of Significant Deterioration at 40 C.F.R. § 52.21; and of operating permit requirements set forth in Section 502 of the Act, 42 U.S.C. §§ 7661-7661f (“Title V”), and its implementing regulations for federal operating permits at 40 C.F.R. Part 71.

Marathon does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint.

The United States and Marathon (the “Parties”) recognize, and the Court by entering this Decree finds, that this Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this 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. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue is proper in this judicial 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 Marathon conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Marathon consents to the following: the Court's jurisdiction over this Decree and any such enforcement action; the Court's jurisdiction over Marathon; and venue in this judicial district.

2. For purposes of this Consent Decree, Marathon 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. APPLICABILITY**

3. The obligations of this Consent Decree apply to and are binding upon the United States, and upon Marathon and any successors, assigns, or other entities or persons otherwise bound by law, consistent with the provisions in Section XVI (Sales or Transfers of Operations). Unless otherwise noted, the obligations of this Decree shall become enforceable on its Effective Date as provided in Section XVIII (Effective Date).

4. Marathon shall: (1) provide a copy of this Consent Decree to its President, Vice Presidents, General Counsel, Environmental Manager, and other managers or field supervisors who will be responsible for implementing the terms of this Consent Decree, and shall ensure that any employees, agents, and contractors whose duties might reasonably include compliance with any provision of this Consent Decree are also provided a copy of, or access to, this Consent Decree and specifically made aware of the requirements of this Consent Decree that fall within such person's duties; and (2) place an electronic version of the Consent Decree on its external and internal environmental website or equivalent site. Marathon shall be responsible for ensuring that all employees and contractors involved in performing any work pursuant to this Consent Decree perform such work in compliance with the requirements of this Consent Decree.

5. In any action to enforce this Consent Decree, Marathon shall not raise as a defense to liability or a stipulated penalty the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Decree. This Section does not preclude Marathon from holding any employee, agent, or contractor of any tier who is alleged to have not complied with this Consent Decree liable for their actions.

### **III. DEFINITIONS**

6. Terms used in this Consent Decree that are defined in the Act or in the regulations promulgated pursuant to the Act, have the meanings assigned to them in the Act or such regulations unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply.

a. "Air Permit Facility" means a facility consisting of one or more Well Pads or New Well Pads that is or will be covered by a federally enforceable permit with a unique air permit number.

b. “Associated Gas” means natural gas from a wellhead, Separator, or Heater Treater routed to a sales gas line or High Pressure Flare.

c. “AVO” means Audio, Visual, Olfactory.

d. “Business Day” means Monday through Friday, with the exception of federal holidays.

e. “Calendar Day” means any of the seven days of the week. In computing any period of time under this Consent Decree expressed in Calendar Days (as opposed to Days or Business Days), where the last Calendar Day would fall on a Saturday, Sunday, or federal holiday, the period shall not be extended to the next Business Day.

f. “Closed Loop Design Guideline” means the design guidelines meeting the requirements set forth in Appendix C and approved by the EPA, which includes steps to properly design, install, and operate a Closed Loop Vapor Control System.

g. “Closed Loop Vapor Control System” or “Closed Loop VCS” means a Vapor Control System equipped with a system of feedback loops from the Tank System to production equipment upstream of the Tank System to continuously measure, control, and record pressure in the Tank System or Storage Tanks within the Tank System, consistent with the requirements of Appendix C.

h. “Complaint” means the Complaint filed by the United States in this action.

i. “Compliance Reporting Period” means the six-month period preceding each Semi-Annual Report (*i.e.*, January 1-June 30 or July 1-December 31).

j. “Compromised Equipment” means equipment associated with a Vapor Control System that is beginning to show signs of wear beyond normal wear and tear (and cannot be addressed by cleaning the equipment) as identified by Marathon.

Examples include cracks or grooves in gaskets, abnormally or heavily corded equipment, beveling of sealing surfaces, or other indications of inefficient connection of the thief hatch to the tank.

k. “Consent Decree” or “Decree” means this Consent Decree and all appendices attached hereto listed in Section XXVIII (Appendices).

l. “Control Point” means the designated pressure at which the Closed Loop Vapor Control System control logic takes action (such as closing valves) to maintain the Tank System pressure below the Leak Point. The Control Point should be set below the Trigger Point in accordance with the Closed Loop Design Guideline.

m. “Date of Lodging” means the date this Decree is filed for lodging with the Clerk of the Court for the United States District Court for the District of North Dakota.

n. “Day,” “day,” or “daily” means a Calendar Day, except that in computing any period of time for a deadline under this Consent Decree expressed in Days (as opposed to Calendar Days), where the last day would fall on a Saturday, Sunday, or federal holiday, the period runs until the close of business of the next Business Day.

o. “Defendant” or “Marathon” means Marathon Oil Company.

p. “DOJ” means the United States Department of Justice and any of its successor departments or agencies.

q. “EDV Actuation Point” means the selected LEAF Tank System pressure at which the Emergency Depressurization Valve (EDV) starts to relieve pressure to the High Pressure Flare.

r. “Effective Date” shall have the definition provided in Section XVIII (Effective Date).



s. “Emissions Calculations SOP” means the standard operating procedure for emissions calculations for air pollution sources developed by Marathon pursuant to Paragraph 13, as approved by the EPA.

t. “Emissions Estimate Worksheet” means the workbook submitted by Marathon to the EPA or NDDEQ that provides the inputs and descriptions of the underlying calculations for emissions estimates of equipment on a Well Pad or New Well Pad in Marathon’s application for a federally enforceable permit.

u. “Emissions Limit” means any limit on VOC emissions in a permit application submitted by Marathon pursuant to Paragraphs 7-9 or in a federally enforceable permit issued thereon.

v. “Engineering Design Standard” means the engineering standard developed by Marathon pursuant to Appendix B, Paragraph 3 (Open Loop Engineering Design Standards and VCS Capacity).

w. “Engineering Evaluation” means an evaluation performed by Marathon pursuant to Appendix B, Paragraph 4 (Open Loop Tank System Field Survey, Engineering Evaluation, and Modification); Appendix C, Paragraph 2.b (Closed Loop VCS Engineering Evaluation); or Appendix D, Paragraph 2.b (LEAF Closed Loop Vapor Control System Engineering Evaluation).

x. “Environmental Mitigation Project” means a project specified in Section V (Environmental Mitigation Projects) and Appendix E of this Consent Decree to remedy, reduce, or offset past excess emissions resulting from Marathon’s alleged violations of the Act in this matter.

y. “EPA” means the United States Environmental Protection Agency and any

of its successor departments or agencies.

z. “Heater Treater” means 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.

aa. “High Pressure Flare” means a control device utilized to control Associated Gas, emissions routed from a VRU, or emissions routed from a LEAF Storage Tank.

bb. “IR Camera Inspection” means an inspection of a Vapor Control System using an optical gas imaging infrared camera (“IR Camera”) designed for and capable of detecting hydrocarbon and VOC emissions, and conducted by trained personnel who maintain proficiency through regular use of the IR Camera.

cc. “LEAF Closed Loop Vapor Control System” means a LEAF Vapor Control System equipped with a system of feedback loops from the LEAF Tank System to production equipment upstream of the LEAF Tank System to continuously measure, control, and record pressure in the LEAF Tank System or LEAF Storage Tanks within the LEAF Tank System in accordance with the requirements of Appendix D.

dd. “LEAF Site” means a facility using one or more non-atmospheric storage tanks capable of receiving Produced Oil and that is subject to the Lowest Emission Automated Facility design requirements set forth in Appendix D.

ee. “LEAF Storage Tank” means a non-atmospheric storage tank at a LEAF Site.

ff. “LEAF Tank System” means one or more LEAF Storage Tanks, with at least one Produced Oil LEAF Storage Tank, that share a common LEAF Vapor Control

System.

gg. “LEAF Vapor Control System” or “LEAF VCS” means the system(s) used to collect, contain, convey, or control vapors from one or more LEAF Storage Tank(s) as well as any other emissions routed to the LEAF Storage Tanks. A LEAF Vapor Control System includes a LEAF Tank System, piping to convey vapors from a LEAF Tank System to a combustion device and/or Vapor Recovery Unit, fittings, connectors, liquid knockout vessels or vapor control piping, openings on LEAF Storage Tanks (such as Pressure Safety Valves), and emission control devices.

hh. “Leak Point” means: (i) the lowest pressure at which emissions are released from any pressure relief devices on a Tank System, as determined consistent with the Closed Loop Design Guideline. For purposes of establishing the Leak Point for a Closed Loop Vapor Control System, the value of the Leak Point shall not be a value exceeding the Set Point; and (ii) for an Open Loop Vapor Control System, the Leak Point developed pursuant to Paragraph 48 (Pressure Monitor Trigger Point and Leak Point Development).

ii. “Low Pressure Flare” means a control device utilized to control vapors routed from a Storage Tank and/or from a vapor recovery tower (“VRT”). A Low Pressure Flare does not control Associated Gas.

jj. “Malfunction” means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, instrumentation, monitoring systems, or a process to operate in a normal manner. Sales line unavailability does not constitute a Malfunction. Failures that are caused, in part, by poor maintenance or careless operation are not Malfunctions.

- kk. “MHA Nation” means the Mandan, Hidatsa and Arikara Nation, also known as the Three Affiliated Tribes, a federally recognized Indian Tribe.
- ll. “NDDEQ” means the North Dakota Department of Environmental Quality.
- mm. “New Well” means an oil and natural gas well constructed, reconstructed or modified, as defined by 40 C.F.R. § 49.152, after the Date of Lodging.
- nn. “New Well Pad” means a Well Pad that is constructed after the Date of Lodging in North Dakota on property owned or operated by Marathon as of the Date of Lodging. This does not include a re-built facility on an existing Well Pad.
- oo. “Normal Operations” means all periods of operation, excluding Malfunctions. For Storage Tanks or LEAF Storage Tanks, Normal Operations includes receipt or transfer of liquids from Separator(s), Heater Treater(s), or VRTs.
- pp. “On-Site Investigation” means Marathon’s physical on-site response (including Marathon representatives) to assess, resolve, and document issue(s) pursuant to Paragraph 10.e (Loss of Continuous Pilot) and Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring).
- qq. “Open Loop Modeling Guideline” means the modeling guideline meeting the requirements of Appendix B and approved by the EPA.
- rr. “Open Loop Vapor Control System” means Tank Systems with Vapor Control Systems that are subject to the Open Loop Vapor Control System requirements in Appendix B.
- ss. “Operator” means the principal on the bond covering a well who is responsible for drilling, completion, and operation of the well, including plugging and

reclamation of the well site.

tt. “Paragraph” means a portion of this Decree identified by an Arabic numeral.

uu. “Parties” means the United States and Marathon.

vv. “Plaintiff” means the United States.

ww. “Potential Peak Instantaneous Vapor Flow Rate” or “PPIVFR” means the maximum instantaneous rate of vapors routed to a Vapor Control System during Normal Operations, including flashing, working, breathing, and standing losses, as determined using the Open Loop Vapor Control System Modeling Guideline.

xx. “Potential to Emit” or “PTE” shall have the meaning set forth 40 C.F.R. § 52.21(b)(4).

yy. “PRD” means the following pressure relief devices: thief hatches, pressure vacuum relief valves (“PVRVs”), and pressure relief valves (“PRVs”), associated with a Tank System. Lockdown thief hatches are excluded from this definition.

zz. “Pressure Alarm Fail” means the alarm established by the Closed Loop Vapor Control System or LEAF Vapor Control System control logic to indicate potentially failed pressure monitors. The Pressure Alarm Fail (PAF) shall be triggered as described in the Closed Loop Design Guideline and LEAF Closed Loop Vapor Control System Design Guideline.

aaa. “Pressurized Liquids” means pressurized Produced Oil upstream of the Storage Tank(s) or LEAF Storage Tank(s), or pressurized Produced Oil in the LEAF Storage Tank(s).

bbb. “Pressurized Safety Valve” or “PSV” means a safety device which

provides final overpressure protection on LEAF Storage Tanks.

ccc. “Produced Oil” means oil that is separated from extracted reservoir fluids during Production Operations.

ddd. “Produced Water” means water that is separated from extracted reservoir fluids during Production Operations.

eee. “Production Operations” means the extraction, separation using Separators and/or Heater Treaters, and temporary storage of reservoir fluids from an oil and natural gas well at a Well Pad.

fff. “Purging” means evacuating air out of equipment used for Production Operations that results in the venting of gas to an unlit flare or other similar location, which allows for the safe start-up of operations following a Shut-In or shut-down for any reason that has the potential to result in creating an explosive atmosphere.

ggg. “Reliable Information” means: (a) any observance or detection of VOC emissions from a Vapor Control System or LEAF Vapor Control System, or associated open-ended line while using an IR Camera, the EPA Method 21 monitoring, or AVO techniques by the EPA, MHA Nation Energy Division staff, Marathon employees, or Marathon contractors trained to conduct inspections for emissions; and (b) any observance or detection of Visible Smoke Emissions from a combustion device associated with a Tank System or LEAF Tank System by the EPA, MHA Nation Energy Division staff, NDDEQ, Marathon employees, or Marathon contractors trained to conduct inspections for emissions. Reliable Information may be obtained at any time after the Date of Lodging. For purposes of this Decree alone, the following shall not be considered Reliable Information:

- (1) Evidence of surface staining alone;
- (2) Emissions observations during active maintenance or repair of equipment on the Well Pad or New Well Pad, where emissions cannot be controlled by a combustion device;
- (3) Emissions observations during well unloading;
- (4) Emissions observations from the PRD(s) of a Storage Tank being actively unloaded during tank truck loadout without emission controls;
- (5) Emission observations during the field testing to collect information for use in an Engineering Evaluation; or
- (6) Emission observations during Purging.

hhh. “Root Cause Analysis” means an assessment conducted through the process of investigation to determine the primary cause and contributing cause(s), if any, of Reliable Information, or as required consistent with Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring).

iii. “Section” means a portion of this Decree identified by a Roman numeral.

jjj. “Separator” means a pressurized vessel designed to separate reservoir fluids into their constituent components of oil, natural gas, and water.

kkk. “Set Point” means the rated pressure at which the Storage Tank Pressure Relief Device or LEAF Storage Tank Pressurized Safety Valve is designed to open or relieve. The Set Point shall be less than or equal to the manufacturer’s rated pressure of the associated Storage Tank(s) or LEAF Storage Tank(s).

lll. “Shut-In” means all liquid flow into the Tank System or LEAF Tank System or piece of equipment upstream of the Tank System or LEAF Tank System has

ceased, as required herein, and the flow of liquids cannot be resumed without Marathon representatives opening valves, activating equipment, or supplying a power source.

mmm. “Storage Tank” shall have the same definition as “storage vessel” in 40 C.F.R. § 60.5430a. A Storage Tank operates at or near atmospheric conditions.

nnn. “Tank System” means one or more Storage Tanks, with at least one Produced Oil Storage Tank, that share a common Vapor Control System.

ooo. “TPY” means tons per year.

ppp. “Trigger Point” means: (i) for a Closed Loop Vapor Control System, a selected tank pressure below the Leak Point and above the Control Point, at which the Closed Loop Vapor Control System control logic triggers an alarm, and at which Production Operations are automatically Shut-In; (ii) for a Closed Loop LEAF Vapor Control System, a selected LEAF Storage Tank Pressure below the EDV Actuation Point, at which the Closed Loop LEAF Vapor Control System control logic triggers an alarm, and at which Production Operations are automatically Shut-In; and (iii) for an Open Loop Vapor Control System, the threshold developed pursuant to Paragraph 48 (Pressure Monitor Trigger Point and Leak Point Development).

qqq. “United States” means the United States of America, acting on behalf of the EPA.

rrr. “Vapor Control System” or “VCS” means the system(s) used to collect, contain, convey, or control vapors from one or more Storage Tank(s) (including flashing, working, breathing, and standing losses), as well as any other emissions routed to the Storage Tank Vapor Control Systems. A Vapor Control System includes a Tank System, piping to convey vapors from a Tank System to a combustion device and/or Vapor



Recovery Unit, fittings, connectors, liquid knockout vessels or vapor control piping, openings on Storage Tanks (such as PRDs), and emission control devices.

sss. “Vapor Recovery Unit” or “VRU” means a device that captures and compresses vapors.

ttt. “Visible Smoke Emissions” means observations of smoke for any period greater than or equal to one minute in any fifteen-minute period during Normal Operations. Pursuant to the EPA Method 22, Visible Smoke Emissions do not include radiant energy or water vapor.

uuu. “VOC” or “VOCs” means volatile organic compounds as defined in 40 C.F.R. § 60.2.

vvv. “Well Pad” means a property with one or more LEAF Storage Tanks or Storage Tank(s) capable of receiving Produced Oil, including New Wells. The Well Pads that are subject to this Decree as of the Date of Lodging are identified in Appendix A.

#### **IV. INJUNCTIVE RELIEF**

##### **A. Air Pollution Source Permitting**

###### **7. Synthetic Minor Permits for Well Pads and New Well Pads**

a. For each Well Pad or New Well Pad, Marathon shall apply for a federally enforceable source-specific permit under 40 C.F.R. §§ 49.151-49.164 or N.D. Admin. Code § 33.1-15-14-02, as applicable, that includes the conditions and limitations set forth in Paragraph 10 (Federally Enforceable Permit Conditions). The application shall meet the requirements of 40 C.F.R. § 49.158.

b. For Well Pads listed in Appendix A, Marathon shall submit the source-specific permit applications required by Paragraph 7.a by the following deadlines:

<b>Appendix A Group</b>	<b>Deadline</b>
Group 1	60 Days after the Effective Date
Group 2	150 Days after the Effective Date
Group 3	300 Days after the Effective Date

c. New Well Pads.

(1) If Marathon commences construction of a New Well Pad within 90 Days of the Effective Date, Marathon shall submit the source-specific permit applications required by Paragraph 7.a no later than 120 Days after the Effective Date;

(2) For all other New Well Pads, Marathon shall submit the source-specific permit applications required by Paragraph 7.a no later than 60 Days prior to the commencement of construction of each New Well Pad.

d. No later than the submission of an application for a permit under Paragraph 7.b, 7.c(1), or 7.c(2), as applicable, Marathon shall implement the conditions in Paragraph 10 (Federally Enforceable Permit Conditions) at each relevant Air Permit Facility. For New Well Pads that are designed and operated in accordance with Appendix E, Section IV (New and Reconstructed Well Pad Emission Reduction Project): (i) the conditions and limitations in Paragraph 10 may be taken into account when calculating potential to emit for registrations submitted under 40 C.F.R. § 49.160 and permit applications submitted in accordance with 40 C.F.R. § 49.158; and (ii) Marathon may commence construction upon submittal of a registration in accordance with 40 C.F.R. § 49.160.

e. Upon issuance of a source-specific permit required by this Paragraph, Marathon shall update Appendix A to include the air permit number in column D.

8. New Wells at Air Permit Facilities. Marathon shall address the addition of New Wells to Air Permit Facilities as follows:

a. Marathon shall ensure compliance with the conditions in Paragraph 10 (Federally Enforceable Permit Conditions) for the entire Air Permit Facility, including the New Well, upon startup of production of the New Well.

b. Any revised application for a source-specific permit or an application for an amended source-specific permit, as applicable, that incorporates the New Well shall meet the requirements of Paragraph 7.a.

9. General Permit. If the EPA or the NDDEQ issues a general permit under 40 C.F.R. § 49.156 or N.D. Admin. Code § 33.1-15-14-02, as applicable, that includes the requirements of Paragraph 10 (Federally Enforceable Permit Conditions), Marathon may comply with Paragraph 7.a by seeking coverage under any such applicable general permit by the deadline set forth in Paragraph 7.b or 7.c. If Marathon has already submitted a permit application under Paragraph 7 (Synthetic Minor Permits for Well Pads and New Well Pads), Marathon may request coverage under the general permit in lieu of its synthetic minor permit application within one calendar year of the effective date of the general permit.

10. Federally Enforceable Permit Conditions. Each federally enforceable permit required by this Consent Decree shall include the following as enforceable conditions:

a. Enforceable Emission Limits.

(1) Enforceable emission limits of less than 100 TPY of VOCs (excluding fugitives) for the entire Air Permit Facility, set as a 12-month rolling total, to be evaluated on a monthly basis.

(2) Production or operational limits applicable to specific emission units at the Air Permit Facility to ensure that the annual Air Permit Facility-wide emissions are less than 100 TPY of VOCs (excluding fugitives) on a 12-month rolling basis. The production or operational limits must be evaluated using a reasonably short averaging period, not to exceed monthly, as reflected in the Emissions Calculations Worksheet.

b. Control of Emissions During Maintenance and Purging.

(1) Marathon shall use a High Pressure or Low Pressure Flare for all emissions associated with maintenance at Tank Systems, LEAF Tank Systems, or other equipment (e.g., Separators or VRUs), or Purging until the presence of oxygen or other conditions make it unsafe or otherwise technically infeasible.

(2) Marathon must keep records of all maintenance and Purging activities that route to either the High Pressure Flare or Low Pressure Flare, a description of the event, and the date, duration, and metered volumes of gas routed to the High Pressure or Low Pressure flare. Marathon shall maintain the records and make the records available to the EPA upon request.

(3) For maintenance and Purging activities that cannot be routed to a High Pressure or Low Pressure Flare to control emissions during the same, Marathon must estimate all associated non-de minimis emissions consistent with the Emissions SOP. Marathon shall maintain the records and make the records available to the EPA upon request.

c. Flare Flow Monitoring.

(1) Marathon shall install, calibrate, operate, and maintain digital flow meters on the inlet to all High Pressure and Low Pressure Flares located at the Well Pads. If there is more than one flare and the flares share a common inlet, there will be only one digital flow meter on the inlet to the respective flare(s) and Marathon shall allocate the total volumetric flow from the meter to the respective flare(s).

(2) The digital flow meters must: (a) have sufficient capacity to ensure that the gas flow rate to the flare at which it is installed will not exceed flow meter capacity; and (b) record the volumetric flow rate at least once every 180 seconds.

(3) If the High Pressure Flare flow monitoring system experiences a Malfunction for more than 30 continuous minutes, Marathon shall repair or replace the flare flow monitoring system within 1 Calendar Day or Shut-In. This excludes failures that are solely due to communication failures to the Supervisory Control and Data Acquisition (“SCADA”) system and for which an accumulated total volume can be updated after communications are re-established. For any such loss or failure of communications, Marathon shall Shut-In if it is unable to re-establish communications within five Calendar Days.

(4) If the Low Pressure Flare flow monitoring system experiences a Malfunction for more than 30 continuous minutes, Marathon shall repair or replace the flare flow monitoring system within 5 Calendar Days or Shut-In. This excludes failures that are solely due to communication failures to the SCADA system and for which an accumulated total volume can be updated after communications are re-established. For any such loss or failure of

communications, Marathon shall Shut-In if it is unable to re-establish communications within five Calendar Days.

(5) If a flare flow monitoring system is not collecting data for more than 30 continuous minutes during a period of flare flow monitoring system Malfunction or during instances of active equipment maintenance and active repair, Marathon shall estimate daily flare gas volumes in standard cubic feet based on the procedures set forth in the Emissions Calculations SOP.

(6) Marathon must maintain flow meter records of the total monthly metered volume in standard cubic feet and 180-second flow meter data, except during periods of Malfunction or during instances of active equipment maintenance and active repair.

(7) Marathon shall record all dates, durations, and causes of flare flow monitoring system Malfunctions and instances of active equipment maintenance and active repair.

d. Flare Pilot Light Monitoring.

(1) Marathon shall install, calibrate, operate, and maintain electronic pilot light monitors on all High Pressure and Low Pressure Flares located at its Well Pads. At Marathon's discretion, some High Pressure and Low Pressure Flares may have redundant pilot light monitors. The pilot light monitors must have the following capabilities:

(a) The pilot light monitors must continuously monitor the pilot light flame; and

(b) The pilot light monitors must record monitoring parameters at least once every 180 seconds, except during periods of pilot light monitor Malfunction.

(2) If there is a loss of communications for the pilot light monitoring system Marathon shall re-establish communication within 5 Calendar Days or Shut-In. Marathon shall record all dates, durations, and causes of such events.

e. Loss of Continuous Pilot.

(1) Except as provided in Paragraph 10.e(3), if all pilot light monitors at a High Pressure or Low Pressure Flare signal that a pilot light flame is not present continuously for five minutes (*i.e.*, a temperature of less than 250°F), or if all pilot light monitors Malfunction, Marathon must automatically Shut-In. Marathon must complete an On-Site Investigation to determine the cause of the non-operational pilot light flame(s) and implement any corrective actions identified in the On-Site Investigation prior to a manual re-start of the Tank System or LEAF Tank System on location.

(2) Marathon shall maintain records of the date and time of Shut-In; the cause(s) of the non-operational pilot light flame(s) or the cause of failure of all pilot light monitors; a description of the corrective action implemented and the date of such implementation; and shall identify whether the required corrective action was completed prior to re-starting Production Operations.

(3) The provisions of this Paragraph 10.e shall not apply when Marathon intentionally turns off any flare for maintenance, Purging, or Shut-In.

11. Public Transparency. Within 30 Days of submittal of a permit application in accordance with Paragraphs 7-9, Marathon must post its VOC emissions for each Air Permit Facility, along with the well name(s) and latitude and longitude for each well, on a public domain Marathon website. The VOC emissions posted shall be the PTE calculations for Well Pads and New Well Pads until one year after the submission of the permit application or for New Well Pads startup of production, at which point Marathon shall make a one-time update to the website with actual emissions data within 30 Days of Marathon's calculation of the 12-month rolling total. Emissions data reported and posted on the website will be presented in a form consistent with the Emissions SOP.

**B. Air Pollution Source Management System and Verification of Emissions**

12. On March 1, 2023, the EPA approved Marathon's Air Pollution Source Management System (the "Management System"), which sets forth requirements for personnel who conduct, prepare, or supervise the calculation of PTE and actual VOC emissions for purposes of oil and natural gas production facility permitting applications. Marathon shall implement the Management System at all Well Pads and New Well Pads. The Management System must electronically monitor and track actual emissions against PTE and the applicable Emissions Limits from startup of production through operation at all applicable facilities. Marathon shall submit any substantive revisions to the Management System, including substantive revisions to the Emissions Calculations SOP, to the EPA for review and approval.

13. Marathon submitted a standard operating procedure for emissions calculations for air pollution sources (Emissions Calculations SOP) to the EPA for review and approval and the EPA approved the Emissions Calculations SOP on April 30, 2024. The approved Emissions



Calculations SOP shall be incorporated into the Management System. The Emissions

Calculations SOP shall include the following:

a. A requirement that all emissions calculations be conducted using either site-specific, geologically representative, or State of North Dakota approved basin-wide default values. Marathon may request EPA approval to use an alternative value. Such request must include supporting documentation and data and an explanation as to how the value is appropriate for use in calculating emissions at a particular Well Pad.

b. A requirement that if Marathon collects site-specific samples for emissions calculations, Marathon shall utilize all relevant data collected that has passed applicable laboratory quality assurance standards.

c. A review process for the designated supervisor under Paragraph 15 (Designated Supervisor for Source Permitting) to analyze and certify, in writing and to the best of the supervisor's knowledge, the accuracy of each calculation conducted. State of North Dakota-approved basin-wide default flash gas emission factors, default basin-wide flash gas molecular weight, default basin-wide flash gas VOC weight percentage, and default basin-wide decline curve values are presumed to be accurate for purposes of the certification of accuracy.

d. Procedures for calculating the "Production Data" inputs used, or otherwise referenced, in estimating Well Pad or New Well Pad emissions, that include, at a minimum:

- (1) Decline curve (for PTE calculations);
- (2) Anticipated annualized average barrels of oil per day (for PTE calculations);

- (3) Annualized average barrels of oil per day;
- (4) Anticipated annualized average of barrels of water per day (for PTE calculations);
- (5) Annualized average of barrels of water per day;
- (6) Anticipated annualized average treater gas flared (Mscfd) (for PTE calculations);
- (7) Actual annualized average treater gas flared (Mscfd);
- (8) Anticipated annualized average high pressure, test separator, heater treater and/or VRT gas flared (Mscfd) (for PTE calculations);
- (9) Actual annualized average high pressure, test separator, heater treater and/or VRT gas flared (Mscfd);
- (10) Anticipated annualized average high pressure, test separator, heater treater and/or VRT gas to sales (Mscfd) (for PTE calculations); and
- (11) Actual annualized average high pressure, test separator, heater treater and/or VRT gas to sales (Mscfd).

e. Procedures for calculating the “Oil Tank Data” emissions and the inputs used, or otherwise referenced, in estimating Well Pad or New Well Pad emissions that include, at a minimum:

- (1) Oil tank emission factor (scf/BBL);
- (2) Oil tank vapor lower and higher heating values;
- (3) Oil tank vapor molecular weight;
- (4) Oil tank vapor VOC weight percentage; and
- (5) Oil tank vapor hazardous air pollutant (“HAP”) weight percentage.

f. Procedures for calculating the “High Pressure Flare, test separator, heater treater and/or VRT data” outputs, where present, used, or otherwise referenced, in estimating Well Pad or New Well Pad emissions that include, at a minimum:

- (1) High Pressure Flare, test separator, heater treater, and/or VRT data lower and higher heating values;
- (2) High Pressure Flare, test separator, heater treater, and/or VRT data molecular weight;
- (3) High Pressure Flare, test separator, heater treater, and/or VRT gas VOC weight percentage;
- (4) High Pressure Flare, test separator, heater treater, and/or VRT gas destruction efficiencies; and
- (5) High Pressure Flare, test separator, heater treater, and/or VRT gas separator HAP weight percentage.

g. Detailed procedures for calculating the “Truck Loading” inputs used, or otherwise referenced, in estimating Well Pad or New Well Pad emissions that include, at a minimum:

- (1) Molecular weight;
- (2) Vapor pressure; and
- (3) Temperature.

h. A procedure for updating or revising the Emissions Calculations SOP, as necessary.

14. Recordkeeping SOP for Emissions Calculations. The Management System must include a Recordkeeping SOP for Emissions Calculations, which shall require that Marathon maintain the following records:

- a. All emissions calculations, data, and underlying documentation relied upon for each input to the calculation;
- b. All permits for each Well Pad and New Well Pad with the initial PTE calculation documentation;
- c. An organizational chart by job title identifying all personnel, whether employed directly or as a contractor, with any responsibility or role related to emissions calculations for a Well Pad or New Well Pad; and
- d. All records of corrective actions taken by Marathon to ensure compliance with the Emissions Calculations SOP.

15. Designated Supervisor for Source Permitting. As part of its Management System, Marathon must hire or designate an employee responsible for: (a) overseeing the requirements of this Consent Decree pertaining to permitting; (b) ensuring all regulatory requirements for permitting are met; and (c) ensuring compliance with Section VIII (Periodic Reporting Requirements).

16. Electronic Databases. Marathon's Management System must include interconnected electronic databases that store all PTE calculations relied upon for permit applications and electronically monitor and track actual emissions against PTE and applicable Emissions Limits from the startup of production through end of operations of all applicable facilities. In addition, the electronic databases must meet the following requirements:

- a. The electronic databases must be configured to generate reports or similar

notifications to alert personnel on a monthly basis of actual emissions calculations that are above the applicable Emissions Limit and prompt Marathon personnel to take the actions required by Paragraph 18 (Emissions Underestimates).

b. The electronic databases must include the following information by Air Permit Facility:

(1) PTE calculated by emission source;

(2) Actual emissions by emission source, calculated on a monthly basis;

(3) Documentation and data sourcing for emissions calculations, including the following inputs:

(a) Compositions and molecular weights (tank vapor and treater gas, HP separator gas, VRT gas streams);

(b) Pressurized liquid sample(s) from Separator or Heater Treater and all associated laboratory analyses conducted for each well;

(c) Gas sample(s) from the initial Separator or Heater Treater and all associated gas laboratory analyses;

(d) 60 Days of initial production data for New Wells;

(e) Volume of flared gas;

(f) Original inputs and results of all process simulations conducted for emissions calculations; and

(g) The make and models of each flare installed.

(4) All final spreadsheets of emissions calculations for each source;

and

(5) Data generated pursuant to Paragraph 17 (Data Confirmation).

17. Data Confirmation. During the initial 60 Days of Normal Operations at New Wells, Marathon shall:

a. Confirm that the following site-specific data is being collected and maintained in an electronic database(s):

- (1) Daily metered volume of sales gas and flared gas in standard cubic feet (scf) measured by the digital flow meter;
- (2) Daily oil production in barrels; and
- (3) 180-second interval (or higher frequency) flare flow meter data and pilot flame monitoring data. This data shall be maintained in an accessible format that is convertible to a “.txt” file;

b. Verify permit application assumptions based on the site-specific data identified in Paragraph 17.a; and

c. Confirm that facilities are shutting in as required by Paragraph 10.e (Loss of Continuous Pilot).

18. Emissions Underestimates. If at any time, a Marathon employee or contractor (including the Auditor required by Section IV.C (Third-Party Audits)) determines that Marathon underestimated PTE or actual emissions for an Air Permit Facility, Marathon shall take the following actions:

a. If actual emissions exceed an Air Permit Facility-wide Emissions Limit set pursuant to Paragraph 10.a(1), Marathon shall:

(1) Shut-In within 24-hours of the discovery. Marathon may resume Normal Operations only after it submits a permit application pursuant to

Paragraph 18.a(3) and implements the operational limitations identified therein;

(2) Re-calculate PTE using the Emissions Calculations SOP to determine what operational limitations are required to ensure future compliance with applicable Emissions Limits; and

(3) Submit a revised permit application or apply for a permit amendment, as applicable, that incorporates the operational limitations identified in Paragraph 18.a(2) and is consistent with the requirements of Section IV.A (Air Pollution Source Permitting).

b. If actual emissions do not yet exceed an applicable Air Permit Facility - wide Emissions Limit for the Air Permit Facility, Marathon shall re-calculate PTE using the Emissions Calculations SOP to determine the necessary operational limitations to ensure compliance with all Emissions Limits and implement those operational limitations. Within 30 Days, Marathon shall submit a revised permit application or apply for a permit amendment, as applicable, that incorporates operational limitations to ensure future compliance with Emissions Limits and is consistent with the requirements of Section IV.A (Air Pollution Source Permitting).

### **C. Third-Party Audits**

19. Marathon shall utilize one or more qualified independent, third-party consultant(s) approved by the EPA (“Auditor”) to conduct third-party audits of: (a) Marathon’s permit applications for all Air Permit Facilities (the “Permitting Audit”); and (b) Marathon’s Management System (the “Management System Audit”). Marathon must provide the Auditor

with full access to all personnel, documents, and facilities pertinent to the auditing requirements under this Section IV.C (Third-Party Audits).

20. Marathon has obtained, and the EPA has approved, an Auditor to conduct the audits required by this Section. If at any time Marathon seeks to replace the Auditor, the following requirements apply:

a. Qualifications. The Auditor must have working process knowledge of oil and gas production operations; expertise and competence in the applicable regulatory programs under federal environmental law; and experience in the preparation and review of permit applications under the Act.

b. Third-Party Auditor Selection. Marathon shall submit a proposed Auditor to the EPA for approval. The submittal shall include the following:

- (1) Information demonstrating that the proposed Auditor's qualifications satisfy Paragraph 20.a (Qualifications);
- (2) Certification that the Auditor will work independently and objectively while performing all activities required under this Section IV.C (Third-Party Audits);
- (3) Certification that the Auditor or Auditor's company has not provided any substantially similar services in North Dakota to Marathon in the two years prior to the first year of the Audit and has no significant conflict of interests;
- (4) Identification of any current or previous work, contractual, or financial relationships with Marathon or any entity related to Marathon; and



(5) Certification that Marathon will not contract with the Auditor for any other work in North Dakota throughout the term of the third-party audits or for one full calendar year after the final Third-Party Audit Report is submitted to the EPA pursuant to Paragraph 23 (Third-Party Audit Report).

21. Audit Work Plan. Marathon shall submit a proposed Audit Work Plan by the Date of Lodging for review and approval by the EPA. The Auditor shall conduct the audits required under this Section in accordance with the approved Audit Work Plan. The Audit Work Plan shall include the following:

a. For the Management System Audit:

(1) Procedure for review of the Management System to ensure it meets all requirements as set forth in Section IV.B (Air Pollution Source Management System and Verification of Emissions); and

(2) Timeline for regular Management System Audits, with the initial audit to be completed within six months of the Effective Date, and subsequent audits conducted on an annual basis.

b. For the Permitting Audit:

(1) Procedure for audit of all emissions calculations conducted for submittal of a permit application required by Section IV.A (Air Pollution Source Permitting) and registrations under 40 C.F.R. § 49.160 for New Well Pads, including review of all the inputs set forth in Paragraph 16.b(3), to evaluate compliance with the Emissions Calculations SOP;

(2) Timeline for audit of emissions calculations conducted for permit applications submitted prior to approval of the proposed Audit Work Plan;

(3) Procedure to ensure review of all emissions calculations by the following deadlines:

(a) Prior to submittal of permit applications required by Paragraph 7 (Synthetic Minor Permits for Well Pads and New Well Pads) for New Well Pads constructed in calendar years 2024-2025;

(b) Prior to submittal of permit applications required by Paragraph 7 (Synthetic Minor Permits for Well Pads and New Well Pads) for Well Pads in Groups 1-2 identified in Appendix A; and

(c) Within 30 Days after submittal for all other permit applications required by Paragraphs 7-9.

(4) Estimated number of permit applications to be reviewed in the coming year and the plan for review completion prior to required deadlines. This section of the Audit Work Plan shall be updated on an annual basis.

22. Implementation of Corrective Actions Upon Identification of Non-Compliance by Third-Party Auditor(s).

a. If the Auditor identifies non-compliance in Marathon's PTE calculations prior to submittal of a permit application, Marathon shall correct the non-compliance before submitting the permit application to the EPA or State of North Dakota. If the Auditor identifies non-compliance in Marathon's PTE calculations for a permit application that has already been submitted, then Marathon shall submit a revised permit application or apply for a permit amendment, consistent with the requirements of Section IV.A (Air Pollution Source Permitting) within 30 Days. To the extent that corrective actions cannot be completed within 30 Days, Marathon shall submit a schedule to the

EPA for completion of such corrective actions.

b. If the Auditor identifies non-compliance in Marathon's Management System, Marathon shall implement corrective actions within 60 Days of Marathon's receipt of the Third-Party Audit Report. To the extent that Management System corrective actions cannot be completed within 60 Days, Marathon shall submit a schedule to the EPA for completion of such corrective actions.

23. Third-Party Audit Report. Marathon shall include a Third-Party Audit Report with each Semi-Annual Report following the period in which the Third-Party Audit was conducted. The Third-Party Audit Report shall be prepared by the Auditor and include the following: (a) description of the work completed; (b) the number of permit applications with identified non-compliance with the Emissions Calculations SOP; (c) identification of any non-compliance with Management System requirements; and (d) recommended corrective action for the identified non-compliance. Marathon will determine the final corrective action taken for the identified non-compliance and document it, including a description of the corrective action, whether the corrective action differs from recommendations of the Third-Party Audit and an explanation as to why, and the date of completion or deadline for completion. Such information will be included with the applicable Third-Party Audit Report section in each Semi-Annual Report.

24. Upon submittal of the Third-Party Audit Report to the EPA, Marathon shall post a summary, including the corrective actions taken, and the Audit Report on its public domain website. Marathon shall also email a link to each Audit Report, including corrective actions taken, to the MHA Nation, in accordance with Section XV (Notices).

#### D. Design Requirements

25. At each TVCS identified in Appendix A, Marathon shall implement one of three design requirements: the Open Loop VCS injunctive relief requirements (Appendix B); the Closed Loop VCS injunctive relief requirements (Appendix C); or the LEAF Closed Loop VCS injunctive relief requirements (Appendix D). Appendix A identifies the type of design requirements to be implemented at each TVCS. At any time, Marathon may provide a written request to EPA for approval to change the design implemented at a given TVCS, including the reasons for such change. If EPA has not responded within ten Business Days, Marathon's request shall be deemed approved. A change of designation from one category of design to another (e.g., Open Loop Vapor Control System to Closed Vapor Control System) does not alleviate Marathon's obligation to meet the applicable deadline set forth in Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS) for the TVCS with the requested design change.

26. Deadlines for Implementation of Design Requirements at Appendix A TVCS.

a. In accordance with the following schedule, at each Tank System or LEAF Tank System Marathon shall either: (i) complete all applicable requirements of Appendix B, Paragraphs 1 through 4; Appendix C, Paragraphs 1 through 2; or Appendix D, Paragraphs 1 through 2, or (ii) Shut-In the applicable Tank System or LEAF Tank System:

<b>Appendix A Group</b>	<b>Deadline</b>
Group 1	60 Days after the Effective Date
Group 2	150 Days after the Effective Date
Group 3	300 Days after the Effective Date
Group 4	400 Days after the Effective Date

b. If a Tank System or LEAF Tank System is Shut-In pursuant to Paragraph

26.a, Marathon shall complete the applicable requirements of Appendix B, Paragraphs 1 through 4; Appendix C, Paragraphs 1 through 2; or Appendix D, Paragraphs 1 through 2 prior to resuming Normal Operations.

27. New Well Pads. New Well Pads must comply with the requirements in Appendix D. Within 5 Days of the startup of production at a New Well Pad, Marathon shall either: (a) complete all requirements of Appendix D, Paragraphs 1, 2.b, and 2.c; or (b) Shut-In the New Well Pad. If a LEAF Tank System is Shut-In, Marathon must complete the requirements of Appendix D, Paragraphs 1, 2.b, and 2.c prior to resuming Normal Operations and Appendix D, Paragraph 4.a no later than 5 Calendar Days after resuming Normal Operations.

28. Redirection of Oil. If Marathon redirects oil from any well that, after the Date of Lodging, produces to a Tank System or LEAF Tank System identified in Appendix A to another Tank System or LEAF Tank System, Marathon shall take the following actions:

a. If Marathon redirects oil from a Tank System or LEAF Tank System identified in Appendix A to one or more Tank System(s) or LEAF Tank System(s) that are not identified in Appendix A (hereinafter “New Tank System”), Marathon shall add the New Tank System(s) to Appendix A following the re-direction of the wells to the New Tank System(s). If Marathon removes the original equipment, Marathon shall remove the original Tank System or LEAF Tank System from Appendix A after equipment removal. At least 30 Days prior to redirecting oil to the New Tank System(s), Marathon shall submit a proposed schedule for compliance of the New Tank System(s) with the applicable requirements of the Consent Decree to the EPA for approval. If the EPA has not approved or denied the proposed schedule within 21 Business Days of receipt, the proposed schedule shall be deemed approved.

b. If Marathon redirects oil from a Tank System or LEAF Tank System identified in Appendix A to another Tank System or LEAF Tank System already identified in Appendix A, and Marathon removes the original equipment, Marathon shall remove the original Tank System or LEAF Tank System from Appendix A.

**E. Directed Inspection and Preventative Maintenance Program**

29. Marathon developed, and on May 13, 2024, the EPA approved, a directed inspection and preventative maintenance (“DI/PM”) program. Marathon shall implement the DI/PM program as approved by the EPA at each Tank System or LEAF Tank System and associated Well Pad (as applicable to equipment at that Well Pad) listed in Appendix A no later than 60 Days after the Effective Date, and at each New Well Pad no later than 60 Days after startup of production. Marathon shall submit any substantive revisions to the DI/PM program to the EPA for review and approval.

30. Marathon shall comply with the terms of the EPA-approved DI/PM program, including the following:

a. Procedures for system-wide inspection and response for the Vapor Control Systems, including twice monthly AVO walk-around inspection of all Vapor Control Systems and associated production equipment (e.g., Separators) to check for VOC emissions (including while Storage Tank(s) are receiving Produced Oil). Marathon may elect to conduct one AVO inspection per month jointly with an IR camera inspection required by Section IV.F (Periodic IR Camera Inspections).

b. SOP for AVO walk-around inspections, including:

(1) Requirement that AVO inspections include checking for hissing, new stains, or other indicators of operational abnormalities.

(2) Definitions for “audio,” “visual,” and “olfactory” components of AVO inspections to assist in training of personnel who will conduct these inspections.

(3) Identification of the critical operating parameters or Set Points to be confirmed during an AVO walk-around inspection, where relevant, and any additional data that must be reviewed.

(4) Requirement that the AVO inspection include the following checks where relevant:

(a) Separators and Heater Treaters – verify that final stage of separation equipment is operating at less than the maximum operating pressure Set Point, the burner management system is set at or above minimum operating temperature, and any dump valve is operating properly and in the correct position;

(b) Vapor Control System – verify that PRDs are properly sealed; other valves are in the correct position (*e.g.*, blowdown valve is not open); the absence of other observed or detectable emissions (using AVO observations) from PRDs and tank piping (such as load line, blowdown line, and vapor line);

(c) Combustion devices – check that the burner, if applicable, is operational; that a pilot light is present; that liquid knockout(s) are drained as necessary; that inlet valves are functioning properly; that auto-ignitor is in good working condition; and that there are no Visible Smoke Emissions;

(d) VRUs – where VRUs are in service, inspect for leaks and any other indications of abnormal operations;

(e) Flare Flow Meters – visually inspect the flare flow meters for any liquid build-up and check operation in compliance with manufacturer specifications;

(f) Dump Valves – check proper operation of the dump valve on the vessel used for the final stage of separation by manually actuating the dump valve, if possible, and observing its operation; and

(g) Inspect lines and clear liquids from any vent lines where liquids can accumulate.

c. Requirement to conduct a quarterly review of all critical Open Loop VCS operating parameters, and Closed Loop VCS and LEAF Closed Loop VCS set points and alarms, as well as to ensure required set-parameters are accurate and that Tank Systems and LEAF Tank Systems are operating as designed.

d. Preventative Maintenance. Marathon shall implement procedures established in its DI/PM for preventative maintenance activities, including long-term maintenance, inspection, and replacement schedules (such as replacement of “worn” equipment). The DI/PM shall indicate specific equipment and inspection or work to be performed, and include:

(1) Once per calendar year:

(a) check any dump valve orifices present on a vessel used for the final stage of separation to ensure they are in good condition and replace them, as necessary.



(b) Perform the manufacturer-specified verification procedure for flare flow meters. Verification procedures should include: (1) document “as found” configuration parameters, (2) perform and document “as found” diagnostics, (3) correct the flare flow meter settings when “as found” diagnostics indicate that meter performance is outside the expected tolerance, and (4) perform a physical inspection of the flare flow meter components as recommended by the manufacturer under the worst-case operating conditions, as applicable. If the verification process identifies the need for a repair or replacement of the flare flow meter, Marathon shall implement any necessary repairs or replacement within one Calendar Day, or Shut-In until the repair or replacement is completed.

(2) Twice per calendar year, and performed no sooner than 120 Days and no later than 210 Days apart:

(a) Clean and check PRD seals, springs, and gaskets for integrity and ensure that each PRD aligns with the parameter(s) identified in the Engineering Evaluation through visual observation;

(b) Repair or replace any Compromised Equipment;

(c) Clean the flame arrestor (replacing as appropriate) and flare blower air-intake, and inspect the flare burner assembly and clean or replace as appropriate; and

(d) Perform any other appropriate maintenance and inspection activities to the extent identified by Marathon in its DI/PM program.

e. Spare Parts Program. Maintain a spare parts program adequate to support Normal Operations, maintenance, and replacement requirements; establish written procedures for the acquisition of parts, including vendor availability on a next-day basis; and evaluate appropriate parts to be kept on hand (such as gaskets and seals for thief hatches kept on trucks and replacement PRDs kept at a central Marathon facility). Beginning within 60 Days of the Effective Date, Marathon shall ensure that an employee has been designated with the responsibility to maintain an adequate spare parts inventory. The spare parts inventory may be based initially on vendor recommendations.

f. Recordkeeping. Establish and implement requirements for appropriate documentation of compliance with DI/PM practices and procedures (by Tank System, LEAF Tank System, or other discrete identifier tied to Tank System or LEAF Tank System) so that the EPA can verify that Marathon is implementing the DI/PM program. This includes creating and maintaining documentation of the date of the inspection or maintenance activity and any corrective action work (including repair, replacement, or upgrade).

g. Training. Ensure that all 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 (such as combustor manufacturer personnel replacing a burner tray), have completed training on the aspects of the DI/PM program, including any SOPs, that are relevant to the personnel's duties. Marathon shall develop a training program to 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 shall 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.

31. Marathon is not required to implement the requirements of Paragraph 30.a through Paragraph 30.d at a Well Pad where all Tank Systems or LEAF Tank Systems are Shut-In and remain Shut-In, so long as Marathon, upon returning one or more Tank System(s) or LEAF Tank System(s) to Normal Operations: (a) conducts an AVO inspection at the Tank System or LEAF Tank System within seven Days of resuming Normal Operations, and (b) otherwise performs all inspections and reviews that would have been required under Paragraph 30.a through Paragraph 30.d during the Shut-In within 16 Calendar Days of resuming Normal Operations.

32. Annual Evaluation. Commencing one year after the Effective Date, Marathon shall conduct an annual evaluation of records associated with each Tank System and LEAF Tank System subject to the DI/PM program as follows:

a. The evaluation shall be conducted once per calendar year by a DI/PM program-trained employee or contractor of Marathon whose primary responsibilities do not include performing duties in the DI/PM program on a routine basis for the particular Tank System or LEAF Tank System under evaluation.

b. The evaluation must include:

(1) Verification that maintenance and inspection schedules and the replacement program have been followed at the appropriate frequency;

(2) Review of 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 Tank System or LEAF Tank System to confirm proper recordkeeping;

(3) Timely response to all issues identified during the evaluation (such as emissions or other operational issues); and

(4) Determination if there are recurrent or systemic issues associated with a particular Tank System or LEAF Tank System.

c. Upon completing review of all Tank Systems and LEAF Tank Systems, Marathon shall evaluate whether there are recurrent or systemic issues across Tank Systems or LEAF Tank Systems, and make appropriate updates to the DI/PM program, including SOPs, as soon as practicable.

d. Marathon shall use best efforts to complete the review required by this Paragraph 32 for no fewer than half of its Tank Systems and LEAF Tank Systems during the first six months of each calendar year.

#### **F. Periodic IR Camera Inspections**

33. Beginning on the Date of Lodging, Marathon shall implement an IR Camera Inspection program of all Vapor Control Systems and LEAF Vapor Control Systems at Well Pads and New Well Pads in accordance with the requirements listed below. IR Camera Inspections must begin at New Well Pads no later than 30 Days after the startup of production. Marathon may request written approval from the EPA to use alternate technology that exists now or is developed in the future.

34. IR Camera Inspections must be conducted pursuant to an EPA-approved SOP. During the IR Camera Inspection, Marathon shall also confirm, for each combustion device used in the associated Vapor Control System or LEAF Vapor Control System, that a pilot light is

present. An IR Camera Inspection of a Tank System and related combustion devices completed pursuant to Appendix B, Paragraph 6 (Open Loop VCS Initial Verification) during a monthly inspection period shall be considered an IR Camera Inspection for purposes of this Paragraph.

35. Marathon shall perform IR Camera Inspections of all Vapor Control Systems and LEAF Vapor Control Systems at Well Pads or New Well Pads on a monthly basis, and representatives of the MHA Nation may observe any such inspection.

36. Marathon shall provide notice to the MHA Nation of upcoming IR Camera Inspections on a weekly basis, but in no event less than one Business Day prior to a scheduled inspection. Such notice must include the anticipated date, time, location, and control number for each Tank System or LEAF Tank System to be inspected, and contact information for Marathon's HES Technician responsible for scheduling IR Camera Inspections. Verification of the MHA Nation's attendance or absence at an inspection is not required for Marathon to perform the inspection. It shall be MHA Nation's responsibility to confirm if there are schedule changes associated with a particular Tank System or LEAF Tank System of interest prior to visiting the facility.

37. IR Camera Inspection Recordkeeping. Marathon shall maintain records of the following for each IR Camera Inspection conducted at Tank Systems and LEAF Tank Systems, and the information shall be provided in a spreadsheet with each Semi-Annual Report:

- a. The date, time, Tank System or LEAF Tank System, number of Storage Tanks or LEAF Storage Tanks inspected, and number of combustion devices inspected;
- b. The date, time, applicable equipment, and location of any Reliable Information; and
- c. The model and manufacturer, where available, of any combustion devices

found with: 1) VOC emissions observed without flame presence indicating combustion, or 2) no pilot light present.

**G. Reliable Information, Investigation, and Corrective Action**

38. The requirements of this Section IV.G (Reliable Information, Investigation, and Corrective Action) begin at the Date of Lodging and apply to Vapor Control Systems and LEAF Vapor Control Systems at Well Pads and New Well Pads. The requirements of this Section apply to LEAF Vapor Control Systems at New Well Pads at the startup of production.

39. Except as provided in Paragraphs 40 and 41 (Open Thief Hatch), as soon as possible but in no more than five Calendar Days after Marathon obtains any Reliable Information, Marathon shall either (a) complete all necessary corrective actions to address the VOC emissions or issues identified, or (b) Shut-In Production Operations. The deadline to respond to a report of Reliable Information observed by the EPA, NDDEQ, or MHA representatives begins upon the date of notification to Marathon, unless Marathon operators are in the field with EPA, NDDEQ, or MHA Nation Energy Division representatives when the Reliable Information is observed. Reliable Information observed on a piece of equipment undergoing repair pursuant to Paragraph 39 or a Vapor Control System or LEAF Vapor Control System undergoing a Root Cause Analysis under Paragraph 44 (Root Cause Analysis) does not constitute an additional instance of Reliable Information triggering documentation obligations under Paragraph 43 (Reliable Information Recordkeeping) or the obligation to conduct a new Root Cause Analysis under Paragraph 44 (Root Cause Analysis).

40. If notice of Reliable Information received by Marathon does not include sufficient information to identify the relevant equipment at an identified Well Pad or New Well Pad, then

Marathon shall conduct an IR Camera Inspection to survey for emissions within five Days. If Reliable Information is observed, then the requirements of Paragraph 39 apply.

41. Open Thief Hatch. An observed open thief hatch must be corrected no later than 12 hours after observation except for Tank Systems in sour service. Tank Systems in sour service must be corrected no later than 24 hours after observation.

42. If Production Operations are Shut-In pursuant to the requirements of Paragraph 39, Marathon shall proceed as follows:

a. If the Tank System or LEAF Tank System has not yet undergone an Engineering Evaluation, Production Operations shall remain Shut-In until the Engineering Evaluations and any necessary modifications have been completed pursuant to the applicable requirements of Appendix B, C, or D. Marathon shall comply with the requirements of Appendix B, Paragraph 6 (Open Loop VCS Initial Verification), Appendix C, Paragraph 4.a, or Appendix D, Paragraph 4.a at that Tank System or LEAF Tank System within 30 Days of resuming any Production Operations associated with that Tank System or LEAF Tank System.

b. If the Tank System or LEAF Tank System has already undergone an Engineering Evaluation, Production Operations shall remain Shut-In until completion of any necessary corrective actions, including, if appropriate, a re-evaluation of the Engineering Evaluation. If a re-evaluation of the Engineering Evaluation is appropriate and results in any modification at the Tank System or LEAF Tank System, Marathon shall comply with the requirements of Appendix B, Paragraph 6 (Open Loop VCS Initial Verification), Appendix C, Paragraph 4.a, or Appendix D, Paragraph 4.a at that Tank System or LEAF Tank System within 30 Days of resuming any Production Operations

associated with that Tank System or LEAF Tank System.

43. Reliable Information Recordkeeping. For each instance where Marathon obtains Reliable Information, Marathon shall document in a spreadsheet the following:
- a. The date and description of Reliable Information and how it was obtained;
  - b. The identification of the Tank System or LEAF Tank System;
  - c. The date corrective actions were made, including a description of the corrective actions;
  - d. The date of the IR Camera Inspection verifying that the corrective actions resolved the Reliable Information observed either during an AVO or IR Camera Inspection. Corrective action for Reliable Information originally observed by Method 21 may be verified by repeating a Method 21 or an IR Camera Inspection; and
  - e. For each Shut-In pursuant to the requirements of Paragraph 39:
    - (1) The date that such Production Operations were Shut-In;
    - (2) The date that corrective actions were made, including a description of the corrective actions;
    - (3) The date that Production Operations were resumed; and
    - (4) The date post-repair/Engineering Evaluation where an IR Camera Inspection was completed and a summary of the results of that inspection, if applicable.

44. Root Cause Analysis. If Marathon obtains three or more instances of Reliable Information related to any single Vapor Control System or LEAF Vapor Control System in any rolling 6-month period, Marathon shall conduct a Root Cause Analysis for that Vapor Control System or LEAF Vapor Control System and identify any appropriate response actions to be



taken to address any operation, maintenance, or design cause(s) identified, along with a schedule for the implementation of those response actions. Appropriate response actions may include proactive solutions to maintenance problems (for example, if thief hatches with gaskets are observed to have an increased failure rate, then a replacement schedule may be appropriate to implement pursuant to Section IV.E (Directed Inspection and Preventative Maintenance Program)). Marathon shall complete the Root Cause Analysis within 60 Days following the third instance of Reliable Information.

#### **H. Tank System Electronic Pressure Monitoring**

45. The requirements of this Section IV.H (Tank System Electronic Pressure Monitoring) apply to all Well Pads with Tank Systems subject to the Open Loop Vapor Control System requirements.

46. By the applicable Tank System deadline in Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS), Marathon shall ensure that one or more electronic pressure monitors are installed and calibrated (in accordance with manufacturer recommendations, if available), on each Tank System subject to the Open Loop Vapor Control System requirements. If at least one of the electronic pressure monitors is properly working, the tank pressure monitoring system is deemed operational. Marathon shall operate and maintain the electronic pressure monitors as follows:

- a. Each electronic pressure monitor shall be linked to a local field controller that is continuously monitored, which automatically transmits to SCADA system.
- b. Each electronic pressure monitor must record a data point at least every 180-seconds (“Measurement”).
- c. Use of the pressure monitoring system must be continuous except during

instances of active equipment maintenance and active repair or during instances of Malfunction of the tank pressure monitors.

d. By the deadline set forth in Paragraph 47 (Performance Optimization Period), each tank pressure monitoring system must be equipped with a latching alarm that is programmed to alert personnel when the tank pressure is above the Trigger Point.

e. After the deadline set forth in Paragraph 47 (Performance Optimization Period), if a tank pressure monitoring system experiences a loss of communications, Marathon shall use best efforts to restore communications within five Calendar Days. Upon restoration of communications, Marathon shall perform any necessary on-site investigations consistent with Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring).

f. After the deadline set forth in Paragraph 47 (Performance Optimization Period), if a tank pressure monitoring system is identified as Malfunctioning, Marathon shall use best efforts to repair the tank pressure monitoring system, within 5 Calendar Days, or the Tank System shall be Shut-In. If multiple tank pressure monitoring systems are present at the Tank System, then all tank pressure monitoring systems must be Malfunctioning to trigger this provision.

g. Marathon shall record all dates, durations, and causes of Malfunctioning pressure monitor systems and report this information as required by Section VIII (Periodic Reporting Requirements).

47. Performance Optimization Period. For the first 60 Days after a Tank System is modified in compliance with Appendix B, Paragraph 4.c (Open Loop VCS Modification) and Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS),

Marathon shall calibrate and optimize electronic tank pressure monitor performance and reliability (such as optimization of pressure monitor location on a Tank System, determination of pressure Measurements, and identification of frequency indicative of over-pressurization). This period shall be used by Marathon and its contractors or electronic pressure monitor vendors to ensure that the electronic pressure monitors, to the greatest extent practicable, are producing quality data that will help identify the potential for over-pressurization of a Tank System.

48. Pressure Monitor Trigger Point and Leak Point Development. No later than 60 Days after the applicable deadlines pursuant to Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS), Marathon must identify the Trigger Point and Leak Point for the Tank System in accordance with the following:

a. The Trigger Point must be at least two ounces per square inch below the lowest Set Point of any PRD in the Tank System (*i.e.*, if a Storage Tank 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>, the Trigger Point can be no greater than 12 oz/in<sup>2</sup>) and less than the Leak Point;

b. The Leak Point must be greater than the Trigger Point and no greater than the lowest Set Point of any PRD in the Tank System;

c. After Marathon determines the Trigger Point and Leak Point for each Tank System, Marathon must conduct an IR Camera Inspection during a pressure test to ensure that the Tank System PRDs are not emitting at or below the designated Leak Point. During the pressure test, the Tank System will be manually allowed to pressure up to at least the designated Leak Point.

49. On-Site Investigation for Tank Pressure Monitoring. Following the performance optimization period in Paragraph 47 (Performance Optimization Period), if a Tank System has

thirty continuous seconds of tank pressure above the Trigger Point or Leak Point, if applicable, Marathon shall conduct an On-Site Investigation. The Investigation must include: (a) a site visit where the variable operating parameters or practices identified as critical by the Engineering Evaluation are reviewed to ensure the Tank System and Vapor Control System are operating as designed, and (b) an IR Camera Inspection of the Tank System. The On-Site Investigation shall be completed as soon as practicable but no later than two Calendar Days following the notice of a latching alarm that initiates the On-Site Investigation. Additional Measurements above the Trigger Point at a Tank System for which Marathon is currently performing an On-Site Investigation will not trigger an additional On-Site Investigation. Latching alarms at a Tank System that is Shut-In for purposes other than Trigger Point exceedances shall not initiate an On-Site Investigation.

50. If a Tank System requires three On-Site Investigations in a 30-Day period, Marathon shall conduct a Root Cause Analysis and identify appropriate response actions to be taken to address any operation, maintenance, or design cause(s) identified, along with a schedule for the implementation of those response actions. Appropriate response actions may include proactive solutions to maintenance problems (for example, if thief hatches with gaskets greater than one year old are observed to have an increased failure rate, then a replacement schedule at or before one year after installation may be appropriate to implement pursuant to Section IV.E (Directed Inspection and Preventative Maintenance Program). Additional On-Site Investigations at a Tank System at which Marathon is currently performing a Root Cause Analysis shall be considered as additional information in that Root Cause Analysis but shall not initiate a new Root Cause Analysis. Marathon shall complete the Root Cause Analysis within 60 Days after the 30-Day period triggering the need for a Root Cause Analysis. Upon completion of a Root Cause

Analysis, Marathon shall reset its count of inspections at zero for purposes of calculating the number of On-Site Investigations in a 30-Day period.

51. Pressure Monitor Recordkeeping. Marathon shall maintain records of the following for Tank Systems requiring On-Site Investigations:

- a. The date, time, location, and numerical value of the initial Measurements that triggered the requirement for On-Site Investigation under Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring);
- b. The date and results of the On-Site Investigations and any corresponding Root Cause Analyses; and
- c. The timeline for response actions identified by the Root Cause Analysis.

52. At any time, Marathon may submit to the EPA for approval a written request for alternative criteria (for example, pressure Measurements and number of Measurements in a given time period) triggering an On-Site Investigation under Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring).

### **I. Other Requirements**

53. Sales Gas Pipeline Monitoring. Marathon shall implement the following by the applicable deadline in Paragraph 7.b for Well Pads and by the applicable deadline in Paragraph 7.c(1) or 7.c(2) for New Well Pads:

- a. Marathon shall maintain monthly flow meter records of the total monthly metered sales gas volume in standard cubic feet and 180-second flow meter data as provided by third-party sales gas meters.
- b. If the sales gas pipeline monitoring system, including associated compensation monitoring devices and data transmission devices, experiences downtime

for one Day, Marathon shall make a one-time notification to the third-party gas gathering company of the occurrence within five Calendar Days. During the period of downtime, 180-second interval data is not required. Instead, Marathon shall record daily, if available, sales gas volumes based on information provided by the third-party gas gathering company. If not available, Marathon will record monthly sales gas volumes.

54. Performance Standards. Upon submitting any permit application pursuant to Section IV.A (Air Pollution Source Permitting), Marathon shall comply with 40 C.F.R. §§ 49.151-160; 42 U.S.C. §§ 7475(a)(1)-(8); and 40 C.F.R. §§ 71.1-71.12. Following the completion of an Engineering Evaluation and any necessary modifications at a Tank System or LEAF Tank System, Marathon shall follow all requirements set forth at 40 C.F.R. §§ 49.4161-49.4168, and for each “storage vessel affected facility” under NSPS OOOO, NSPS OOOOa, and NSPS OOOOb, comply with applicable requirements set forth at 40 C.F.R. §§ 60.5360-60.5430, 60.5360a-60.5432a, or 60.5360b-60.5432b. Marathon must comply with the applicable control requirements in 40 C.F.R. §§ 60.5395(d)(1), 60.5395a(a)(2), or 60.5395b(a)(2) through (b)(1)(i)-(iii) and may not elect to comply with 40 C.F.R. §§ 60.5395(d)(2), 60.5395a(a)(3), or 60.5395b(a)(3). Such obligations shall continue until Termination under Section XXI (Termination) unless all wells that the Tank System or LEAF Tank System is servicing have been permanently plugged and abandoned consistent with Section XVII (Plugging and Abandonment).

55. Permits. Where any compliance obligation under this Section requires Marathon to obtain a federal, state, or local permit or approval, Marathon shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Marathon may seek relief under the provisions of Section X (Force Majeure) for any delay in the

performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Marathon has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

56. Emission Credit Generation. Marathon shall neither generate nor 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 reduction credits.

## **V. ENVIRONMENTAL MITIGATION PROJECTS**

57. Marathon shall implement the Environmental Mitigation Project(s) (“Projects”) described in Appendix E in compliance with the approved plan and schedule for such Project and other terms of this Consent Decree.

58. Marathon shall maintain and, within 30 Days of an EPA request, provide copies of all documents to identify and substantiate the costs expended to implement the Projects described in Appendix E.

59. All plans and reports prepared by Marathon pursuant to the requirements of this Section V (Environmental Mitigation Projects) shall be submitted to the EPA and, with the exception of confidential business information, shall be made available to the public by Marathon upon request and without charge.

60. Project Certification. Marathon shall certify, as part of each plan submitted to the EPA for any Project, that:

- a. As of the date of executing this Decree, Marathon is not required to perform or develop the Project by any federal, state, or local law or regulation; by any

agreement or grant; or as injunctive relief awarded in any other action in any forum;

b. The Project is not a project that Marathon was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree; and

c. Marathon has not received and will not receive credit for the Project in any other enforcement action.

61. Marathon shall use its best efforts to secure as much environmental benefit as possible for the Project, consistent with the applicable requirements and limits of this Decree.

62. Project Completion Notice. Within 60 Days following the completion of the Project required under this Consent Decree (including any applicable periods of demonstration or testing), Marathon shall submit to the EPA 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 Marathon in implementing the Project.

## **VI. INJUNCTIVE RELIEF AND MITIGATION PROJECT SUBMITTALS**

63. Consent Decree Deadlines. No later than 10 Days after the Effective Date, Marathon shall submit to the EPA for review a list of deadlines included in this Consent Decree. The list shall be substantially in the same form as Appendix F and shall be submitted in an electronic format (e.g., an unlocked spreadsheet or similar format agreed to by the Parties). In the event of a conflict between the list generated pursuant to this Paragraph and the Consent Decree, the Consent Decree shall control.

64. Approval of Deliverables. After review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, the EPA will 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.

65. If the submission is approved pursuant to Paragraph 64(a), Marathon 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 64(b) or Paragraph 64(c), Marathon shall, upon written direction from the EPA, take all actions required by the approved plan, report, or other item that the EPA determines are technically severable from any disapproved portions.

66. If the submission is disapproved in whole or in part pursuant to Paragraph 64(c) or Paragraph 64(d), Marathon 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, Marathon shall proceed in accordance with the preceding Paragraph.

67. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, the EPA may again require Marathon to correct any deficiencies, in accordance with the preceding Paragraphs.

68. If Marathon elects to invoke Dispute Resolution as set forth in Section XI (Dispute Resolution) concerning a decision by the EPA to disapprove, approve on specified conditions, or modify a deliverable, Marathon shall do so by sending a Notice of Dispute in accordance with Paragraph 99 (Informal Dispute Resolution) within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.

69. Any stipulated penalties applicable to the original submission, as provided in Section IX (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 Marathon's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

## VII. CIVIL PENALTY

70. Within 30 Days after the Effective Date, Marathon shall pay to the United States the sum of \$64.5 million as a civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413. If any portion of the civil penalty is not paid when due, Marathon shall pay interest on the amount past due, accruing from the Effective Date through the date of payment at the rate specified in 28 U.S.C. § 1961.

71. Payment Instructions. Marathon shall pay the civil penalty by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to Marathon by the Financial Litigation Unit ("FLU") of the U.S. Attorney's Office for the District of North Dakota after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number that Marathon shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Celia Peressini  
990 Town and Country Blvd.  
Houston, TX 77024  
email: [cperessini@marathonoil.com](mailto:cperessini@marathonoil.com)

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

72. At the time of payment, Marathon shall send a copy of the EFT authorization form, the EFT transaction record, and a transmittal letter: (i) to the EPA via email at [cinwd\\_acctsreceivable@epa.gov](mailto:cinwd_acctsreceivable@epa.gov) or via regular mail at the EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to DOJ in accordance with Section XV (Notices); and (iii) to the EPA in accordance with Section XV (Notices). The transmittal letter shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Marathon Oil Company*, and shall reference the civil action number, CDCS number, and DOJ case number 90-5-2-1-10388/4.

73. Not Tax Deductible. Marathon shall not deduct any penalties paid under this Consent Decree pursuant to this Section VII (Civil Penalty) or Section IX (Stipulated Penalties) in calculating its federal tax.

### **VIII. PERIODIC REPORTING REQUIREMENTS**

74. By July 31<sup>st</sup> and January 31<sup>st</sup> of each year, Marathon shall submit to DOJ and the EPA a Semi-Annual Report that contains the following information for the Compliance

Reporting Period:

a. Air Pollution Source Permitting (Section IV.A):

(1) Copies of all permit applications for Well Pads and New Wells

Pads submitted during the Compliance Reporting Period.

(2) Notice of planned construction of New Well Pads in North Dakota for the forthcoming Reporting Period, including location (i.e., State or FBIR) and estimated timeline for permitting and construction.

(3) For each digital flow meter required under Paragraph 10.c (Flare Flow Monitoring), the accumulated flow meter value organized by month, air permit number, and TVCS name and number as identified in Appendix A.

(4) Identification of all flare flow monitoring system Malfunctions experienced at a flow meter required under Paragraph 10.c (Flare Flow Monitoring), including location, date, duration, and cause.

(5) Identification of all pilot light monitor Malfunctions experienced at a pilot light monitor required by Paragraph 10.d (Flare Pilot Light Monitoring), and including all information required by Paragraph 10.d(2).

(6) A screenshot of any VOC emissions posted to Marathon's public domain website as required by Paragraph 11 (Public Transparency).

(7) A description of all On-Site Investigations conducted pursuant to Paragraph 10.e (Loss of Continuous Pilot), including: (a) the date, time, and duration of the automatic Shut-In; (b) the date and time of the On-Site Investigation; (c) the results of the On-Site Investigation determining, to the extent possible, the reason for the flare downtime event; and (d) a description of the required corrective actions conducted to ensure the pilot light flame(s) are lit consistent with manufacturer requirements for lit flares.

(8) A copy of any annual deviation reports completed for source specific permits issued under Paragraph 7 (Synthetic Minor Permits for Well Pads and New Well Pads).

b. Air Pollution Source Management System and Verification of Emissions (Section IV.B):

(1) A copy of any revisions to the Recordkeeping SOP for Emissions Calculations required by Paragraph 14 (Recordkeeping SOP for Emissions Calculations).

(2) Verification that data was collected during field confirmation under Paragraph 17 (Data Confirmation).

(3) Notification of any Shut-In events required under Paragraph 18 (Emissions Underestimates). The notification shall include the date of the Shut-In, the reason for the Shut-In, the date that PTE was re-calculated, if applicable, and the date the Air Permit Facility as identified in Appendix A, was brought back to Normal Operations.

(4) A description of any corrective actions taken pursuant to Paragraph 18 (Emissions Underestimates) to the extent not included in the Audit Report.

c. Third-Party Audits (Section IV.C): the Audit Report and a screenshot of the public posting of the Audit Report on Marathon's public domain website pursuant to Paragraph 24. Marathon shall include a list of corrective actions taken to address any identified Audit non-compliances, including a description of the corrective actions and the date such actions were taken.

d. Open Loop, Closed Loop, and LEAF Vapor Control System Requirements

(Section IV.D, Appendices B, C, and D):

- (1) A copy of the Open Loop Modeling Guideline, Closed Loop Design Guideline, or LEAF Design Guideline if they were revised during the reporting period.
- (2) Status and/or completion of either the Field Surveys required in Appendix B, Paragraph 4 (Open Loop Tank System Field Survey, Engineering Evaluation, and Modification), Appendix C, Paragraph 2.a (Closed Loop Tank System Field Survey), or Appendix D, Paragraph 2.a (Closed Loop LEAF Tank System Field Survey).
- (3) Status and/or completion of Open Loop, Closed Loop, or LEAF VCS Engineering Evaluations. Include a summary of any modifications to the Open Loop Vapor Control Systems (Appendix B, Paragraph 4.c (Open Loop VCS Modification)), and a list of any Shut-In Tank Systems or Shut-In LEAF Tank Systems due to a failure to complete an applicable Engineering Evaluation, or due to a failure to implement any Open Loop Vapor Control System modifications resulting from the Open Loop Engineering Evaluation (Appendix B, Paragraph 4.c (Open Loop VCS Modification)) by the deadline set forth in Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS).
- (4) The information identified in Appendix B, Paragraph 8 (Certification of Completion Report for Open Loop VCSs), Appendix C, Paragraph 4.b (Certification of Completion Report for Closed Loop VCSs), or Appendix D, Paragraph 4.b (LEAF Site Certification of Completion Report).

(5) A summary of any evaluations undertaken pursuant to Appendix B, Paragraph 4.b (Open Loop VCS Engineering Evaluation), Appendix C, Paragraph 2.b (Closed Loop VCS Engineering Evaluation), or Appendix D, Paragraph 2.b (LEAF Closed Loop Vapor Control System Engineering Evaluation) during that reporting period to determine whether modifications were necessary at Vapor Control Systems for other Tank Systems or LEAF Vapor Control Systems for other LEAF Tank Systems and the timing, results, locations, and description of any modifications or a timeline for the completion such modifications.

(6) A copy of the alarm and Shut-In log required under Appendix C, Paragraph 4.c and Appendix D, Paragraph 4.c.

e. Directed Inspection and Preventative Maintenance Program (Section IV.E): Status of DI/PM program implementation, including:

(1) A copy of Marathon's DI/PM program if revised during the reporting period.

(2) Identification of any new or modified maintenance or inspection schedules or replacement program, including the reasons for the change.

(3) A summary of any modifications to the spare parts program, including the reasons for the change.

(4) For the Annual Evaluation required under Paragraph 32 (Annual Evaluation), documentation that includes: (a) identification of Tank Systems and LEAF Tank Systems reviewed; (b) the date that review of each Tank System or LEAF Tank System was completed; (c) a discussion of any systemic issues

identified by Marathon; and (d) the nature and timing of any DI/PM program modifications, corrective actions, or other actions as a result of this review.

f. Periodic IR Camera Inspections (Section IV.F): Spreadsheet of the information specified in Paragraph 37 (IR Camera Inspection Recordkeeping).

g. Reliable Information, Investigation, and Corrective Action (Section IV.G):

(1) Spreadsheet of the information specified in Paragraph 43 (Reliable Information Recordkeeping).

(2) Identification of any Root Cause Analyses conducted, including the results of the analysis and the proposed timeline for any response actions not completed at the time of submission of the Semi-Annual Report.

h. Tank System Electronic Pressure Monitoring (Section IV.H). The status of installation and calibration of pressure monitors and a spreadsheet of the information specified in Paragraph 51 (Pressure Monitor Recordkeeping).

i. Sales Gas Monitoring. For sales gas pipeline monitoring required under Paragraph 53 (Sales Gas Pipeline Monitoring), the accumulated flow meter values, organized by month and as provided by the third party or as otherwise obtained by Marathon.

j. Appendix A. Updated Appendix A that includes: (1) any air permit numbers obtained during the Compliance Reporting Period; (2) any New Wells or New Well Pads constructed, reconstructed, or modified during the Compliance Reporting Period; (3) addition of any New Tank Systems or removal of Tank Systems or LEAF Tank Systems as a result of redirection of oil, as specified in Paragraph 28 (Redirection of Oil); (4) removal of any Tank Systems or LEAF Tank Systems for which all wells



have been permanently plugged and abandoned pursuant to Section XVII (Plugging and Abandonment); and (5) removal of any Well Pads that have been terminated pursuant to Paragraph 135 (Partial Termination for Specific Well Pads or New Well Pads).

k. Environmental Mitigation Projects (Section V and Appendix E). A summary of Environmental Mitigation Project activities undertaken, status of applicable milestones, and a summary of costs incurred.

l. Consent Decree Deadlines. Updates to Appendix F, as necessary.

75. The Semi-Annual 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.

76. If Marathon violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Marathon shall notify the DOJ and the EPA of such violation in writing, in the next Semi-Annual Report after Marathon becomes aware of the violation. Such notice shall include the likely duration of the violation, the emission impact of the violation, an explanation of the violation's likely cause, and a description of the corrective action 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 notification is due, Marathon shall so state in the notification. Marathon shall investigate the cause of the violation and shall then submit an amendment to the notification, including a full explanation of the cause of the violation, within 30 Days of the day Marathon becomes aware of the cause of the violation and identifies the corrective action(s) to prevent the violation from recurring. Nothing in this Paragraph or the following Paragraph relieves Marathon of its obligation to provide the notice required by Section X (Force Majeure).

77. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Marathon's performance under this Consent Decree may pose an immediate threat to the public health or welfare or the environment, Marathon shall comply with any applicable federal, state, or local laws and, in addition, shall notify the EPA by email as soon as possible but no later than 24 hours after Marathon first knew of the violation or event. This notice requirement is in addition to the requirement to provide notice of a violation of this Decree set forth in the preceding Paragraph.

78. Certification Statement. Each report submitted by Marathon under this Section, and each Certification of Completion Report submitted pursuant to the requirements of Appendix B, Paragraph 8 (Certification of Completion Report for Open Loop VCSs); Appendix C, Paragraph 4.b (Certification of Completion Report for Closed Loop VCSs), or Appendix D, Paragraph 4.b (LEAF Site Certification of Completion Report) shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of perjury 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.

This certification requirement does not apply to emergency notifications where compliance would be impractical.

79. The reporting requirements of this Consent Decree do not relieve Marathon 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.

80. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Decree and as otherwise permitted by law.

### **IX. STIPULATED PENALTIES**

81. Marathon shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section X (Force Majeure), or reduced or waived by the United States pursuant to Paragraph 85 (Reduction or Waiver of Stipulated Penalties). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

a. Violation of Air Pollution Source Permitting Requirements.

<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
1.	Failure to timely apply for a federally enforceable permit	\$2,500 per Day per Air Permit Facility
2.	Failure to submit an application consistent with the requirements of Paragraph 10 (Federally Enforceable Permit Conditions)	\$2,500 per Day per Air Permit Facility
3.	Failure to comply with any permit condition set forth in Paragraph 10 (Federally Enforceable Permit Conditions) after the applicable Consent Decree deadline, with the exception of recordkeeping requirements	\$2,500 per permit condition violation per Air Permit Facility per Day of violation
4.	Failure to maintain records as required by Paragraph 10 (Federally Enforceable Permit Conditions)	\$1,000 per violation of recordkeeping requirement

<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
5.	Failure to post VOC emissions per Air Permit Facility on a publicly available website as required by Paragraph 11 (Public Transparency)	\$500 per Day per missing Air Permit Facility

b. Violation of Air Pollution Source Management System Requirements

<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
1.	Failure to maintain records required by Paragraph 14 (Recordkeeping SOP for Emissions Calculations)	\$500 per Well Pad
2.	Failure to comply with the electronic database requirements in Paragraph 16 (Electronic Databases)	\$1,000 per Day of violation
3.	Failure to confirm data for permit application assumptions as required by Paragraph 17 (Data Confirmation)	\$1,000 per New Well per Day for the first 30 Days of noncompliance; \$2,500 per Day thereafter
4.	Failure to Shut-In or implement operational changes to ensure compliance with an Emission Limit as required by Paragraph 18.a	\$20,000 per Day per Air Permit Facility
5.	Failure to implement operational changes to ensure compliance as required by Paragraph 18.b	\$2,500 per Day per Air Permit Facility

c. Violation of Third-Party Audit Requirements

<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
1.	Failure to provide a Third-Party Audit Work Plan to the EPA in compliance with the requirements of Paragraph 21 (Audit	\$2,500 per Day

Number	Consent Decree Violation	Stipulated Penalty
	Work Plan)	
2.	Failure to comply with the Third-Party Audit Work Plan	\$2,500 per violation per Day
3.	Failure to implement corrective actions in compliance with Paragraph 22 (Implementation of Corrective Actions Upon Identification of Non-Compliance by Third-Party Auditor(s)), except corrective actions for which stipulated penalties are owed pursuant to Paragraph 81.b.4	\$2,500 per Day per corrective action
4.	Failure to post a summary and Audit Report on a Marathon public domain website or failure to provide a link to the report to the MHA as required by Paragraph 24	\$1,000 per Day until the missing summary and/or Audit Report is posted; or until the MHA receives a link

d. Violation of Design Requirements

Number	Consent Decree Violation	Stipulated Penalty
1.	Failure to sample and conduct QA/QC analyses as required by Appendix B, Paragraph 1 (Pressurized Liquid Sampling)	\$500 per Day for the first 30 Days of noncompliance; \$2,500 per Day thereafter
2.	Failure to conduct evaluation of the condition of all PRDs, mountings, and gaskets at each Storage Tank by the applicable deadline, as required by either Appendix B, Paragraph 4.a, Appendix C, Paragraph 2.a (Closed Loop Tank System Field Survey), or Appendix D, Paragraph 2.a (Closed Loop LEAF Tank System Field Survey)	\$500 per Day per Tank System or LEAF Tank System for the first 30 Days of noncompliance; \$1,500 per Day per Tank System or LEAF Tank System thereafter.
3.	Failure to comply with the recordkeeping requirements of Appendix B, Paragraph 4.a(4), Appendix C, Paragraph 2.a(4), or Appendix D, Paragraph 2.a(3)	\$5,000 per Tank System or LEAF Tank System

Number	Consent Decree Violation	Stipulated Penalty
4.	Failure to take the actions required by Appendix B, Paragraph 4.b (Open Loop VCS Engineering Evaluation) or 4.c (Open Loop VCS Modification); Appendix C, Paragraph 2.b (Closed Loop VCS Engineering Evaluation) or 2.c (Closed Loop VCS Modification); or Appendix D, Paragraph 2.b (LEAF Closed Loop Vapor Control System Engineering Evaluation) or Paragraph 2.c (LEAF Closed Loop Vapor Control System Modification)	\$500 per Day per Tank System or LEAF Tank System for the first 30 Days of noncompliance; \$1,500 per Day per Tank System or LEAF Tank System thereafter.
5.	Failure to conduct an IR Camera Inspection as required by Appendix B, Paragraph 6 (Open Loop Vapor Control System Initial Verification); conduct the verification set forth at Appendix C, Paragraph 4 (Closed Loop VCS Verification of Engineering Evaluation); or conduct the verification at Appendix D, Paragraph 4 (LEAF Closed Loop Vapor Control System Verification of Engineering Evaluation)	\$500 per Day per Vapor Control System or LEAF Closed Loop Vapor Control System for the first 30 Days of noncompliance; and \$1,500 per Day per violation thereafter.
6.	Failure to maintain IR camera records as required by Appendix B, Paragraph 6.b, Appendix C, Paragraph 4.a(2)(ii), or Appendix D, Paragraph 4.a(2)(c)	\$500 per IR video file per Tank System or LEAF Tank System
7.	Failure to complete and submit a Certification of Completion Report as required by Appendix B, Paragraph 8 (Certification of Completion Report for Open Loop VCSs), Appendix C, Paragraph 4.b (Certification of Completion Report for Closed Loop VCSs), or Appendix D, Paragraph 4.b (LEAF Site Certification of Completion Report)	\$500 per Day for the first 30 Days of noncompliance and \$1,500 per Day thereafter.
8.	Failure to timely complete requirements of Appendix B, Paragraph 9.a (Open Loop	\$500 per Day per Vapor Control System or LEAF

Number	Consent Decree Violation	Stipulated Penalty
	VCS Post-Certification of Completion Modifications) and/or timely submit an updated Certification of Completion as required by Appendix B, Paragraph 9.b, or Appendix D, Paragraph 2.c (LEAF Closed Loop Vapor Control System Modification)	Closed Loop Vapor Control System for the first 30 Days of noncompliance; and \$1,500 per Day per violation thereafter.
9.	Failure to maintain a complete alarm and Shut-In log as required by Appendix C, Paragraph 4.c, or Appendix D, Paragraph 4.c	\$1,000 per Day per violation thereafter.
10.	Failure to comply with redirection of oil requirements set forth in Paragraph 28 (Redirection of Oil)	\$2,500 per Tank System or LEAF Tank System per Day of violation for the first 15 Days; \$5,000 per Tank System or LEAF Tank System per Day of violation thereafter.

e. Violation of DI/PM Program Requirements

Number	Consent Decree Violation	Stipulated Penalty
1.	Failure to implement an approved Directed Inspection and Preventative Maintenance program at each Tank System or LEAF Tank System, as required by Paragraphs 29-31	\$1,000 per Day per Tank System or LEAF Tank System for the first 30 Days of noncompliance; \$5,000 per Day per Tank System or LEAF Tank System thereafter.
2.	Failure to establish, implement, or revise preventative maintenance schedules as required by Paragraph 30.d (Preventative Maintenance); maintain, review, or modify spare parts inventory as required by Paragraph 30.e (Spare Parts Program); train personnel as required by Paragraph 30.g	\$1,000 per Day per violation for the first 15 Days of noncompliance; \$2,500 per Day per violation thereafter.

Number	Consent Decree Violation	Stipulated Penalty
	(Training); conduct an annual evaluation in compliance with Paragraph 32 (Annual Evaluations); or perform the verifications, reviews, updates, evaluations, and corrections as required by Paragraph 32 (Annual Evaluations)	

f. Violation of Periodic IR Camera Inspection Requirements

Number	Consent Decree Violation	Stipulated Penalty
1.	Failure to conduct periodic IR Camera Inspections as required by Paragraphs 33-35 in accordance with the EPA approved IR Camera SOP.	\$500 per Day per Tank System or LEAF Tank System for the first 30 Days of noncompliance; \$1,500 per Day per Tank System or LEAF Tank System thereafter, up and until the next required IR Camera Inspection has been conducted.
2.	Failure to provide written notification to MHA Nation of IR Camera Inspection(s), as required by Paragraph 36	\$500 per violation
3.	Failure to comply with the recordkeeping requirements of Paragraph 37 (IR Camera Inspection Recordkeeping)	\$2,500 per IR Camera Inspection per Tank System or LEAF Tank System

g. Violation of Reliable Information Requirements

Number	Consent Decree Violation	Stipulated Penalty
1.	Failure to complete all necessary corrective actions or Shut-In as required by	\$5,000 per Day per Tank System or LEAF Tank System for the first 15 Days of



<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
	Paragraphs 39-42	noncompliance; and \$15,000 per Day per Tank System or LEAF Tank System thereafter.
2.	Failure to comply with the recordkeeping requirements of Paragraph 43 (Reliable Information Recordkeeping)	\$2,500 per recordkeeping violation
3.	Failure to complete a Root Cause Analysis or implement appropriate response actions identified during a Root Cause Analysis as required by Paragraph 44 (Root Cause Analysis)	\$1,000 per Day per Tank System or LEAF Tank System for the first 15 Days of violation; \$2,500 per Day per violation thereafter

h. Violation of Tank System Electronic Pressure Monitoring Requirements

<b>Number</b>	<b>Consent Decree Violation</b>	<b>Stipulated Penalty</b>
1.	Failure to equip Tank System with pressure monitors as required by Paragraph 46	\$1,000 per Day per Tank System for the first 15 Days of noncompliance; and \$2,500 per Day per Tank System thereafter.
2.	Failure to develop Trigger Point as required by Paragraph 48 (Pressure Monitor Trigger Point and Leak Point Development)	\$1,000 per Day per Tank System for the first 15 Days of noncompliance; and \$2,500 per Day per Tank System thereafter.
3.	Failure to conduct On-Site Investigation for Tank Pressure Monitoring as required by Paragraph 49 (On-Site Investigation for Tank Pressure Monitoring) or a Root Cause	\$1,000 per Day per Tank System for the first 15 Days of noncompliance; and \$2,500 per Day per Tank System

Number	Consent Decree Violation	Stipulated Penalty
	Analysis as required by Paragraph 50	thereafter.
4.	Failure to maintain records as required by Paragraph 51 (Pressure Monitor Recordkeeping)	\$2,500 per Tank System

i. Violation of Environmental Mitigation Project Requirements.

Consent Decree Violation	Stipulated Penalty
Failure to complete an Environmental Mitigation Project in compliance with Section V (Environmental Mitigation Projects) and Appendix E to this Decree	\$500 per Day for the first 30 Days of noncompliance; \$1,500 per Day thereafter.

j. Violation of Periodic Reporting Requirements.

Consent Decree Violation	Stipulated Penalty
Failure to submit a Semi-Annual Report as required by Paragraph 74	\$500 per Day for the first 30 Days of noncompliance; and \$1,500 per Day thereafter.

82. Late Payment of Civil Penalty. If Marathon fails to pay the civil penalty required to be paid under Section VII (Civil Penalty) when due, Marathon shall pay a stipulated penalty of \$2,000 per Day for each Day that the payment is late.

83. 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 violations of separate requirements of this Consent Decree.

84. Marathon shall pay stipulated penalties to the United States within 30 Days of receiving a written demand by the United States.

85. Reduction or Waiver of Stipulated Penalties. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

86. Stipulated penalties shall continue to accrue as provided in Paragraph 83 during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement of the Parties or by a decision of the EPA that is not appealed to the Court, Marathon shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of the EPA's decision or order;

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Marathon 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 86.c, below; or

c. If any Party appeals the District Court's decision, Marathon shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

87. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Section IV.G (Reliable Information, Investigation, and Corrective Action) that have occurred prior to the Effective Date, provided that stipulated penalties that may have accrued

prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

88. If Marathon fails to pay stipulated penalties according to the terms of this Consent Decree, Marathon shall be liable for interest on such penalties, as provided for 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 from seeking any remedy otherwise provided by law for Marathon's failure to pay any stipulated penalties.

89. Marathon shall pay stipulated penalties owing to the United States in the manner set forth in Paragraph 71 (Payment Instructions) and with the confirmation notices required by Paragraph 72, 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.

90. The payment of penalties and interest, if any, shall not alter in any way Marathon's obligation to complete the performance of the requirements of this Consent Decree.

91. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XIII (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Marathon's violation of this Decree or applicable law, including an action against Marathon 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 paid pursuant to this Consent Decree.

## **X. FORCE MAJEURE**

92. “Force majeure,” for purposes of this Consent Decree, means any event arising from causes beyond the control of Marathon, of any entity controlled by Marathon, including their officers, employees, agents, contractors, and consultants, that delays or prevents the performance of any obligation under this Decree despite Marathon’s best efforts to fulfill the obligation. The requirement that Marathon 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) after it has occurred to prevent or minimize any resulting delay and any adverse effects to the greatest extent possible. “Force majeure” does not include Marathon’s financial inability to perform any obligation under this Consent Decree.

93. If any event occurs for which Marathon will or may claim a force majeure, Marathon shall provide notice by email to the EPA within 72 hours of when Marathon first knew or should have known that the event would likely delay or prevent performance. Marathon shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Marathon knew or should have known.

94. Within seven Days after the notice under Paragraph 93, Marathon shall provide in writing to the EPA: (a) an explanation and description of the event and its effect on Marathon’s completion of the requirements of the Consent Decree; (b) a description and schedule of all actions taken or to be taken to prevent or minimize the delay and/or other adverse effects of the event; (c) if applicable, the proposed extension of time for Marathon to complete the requirements of the Consent Decree; (d) Marathon’s rationale for attributing such delay to a force majeure if it intends to assert such a claim; and (e) a statement as to whether, in the opinion

of Marathon, such event may cause or contribute to an endangerment to public health or welfare or the environment. Marathon shall include with any notice all available documentation supporting any claim that the delay was attributable to a force majeure.

95. Failure to comply with the requirements in Paragraphs 93-94 precludes Marathon from asserting any claim of force majeure regarding that event, provided, however, that the EPA may, in its unreviewable discretion, excuse such failure if it is able to assess to its satisfaction whether the event is a force majeure, and whether Defendant has exercised its best efforts, under Paragraph 92.

96. After receipt of any claim of force majeure, the EPA will notify Marathon of its determination whether Marathon is entitled to relief under Paragraph 92, and, if so, the excuse of, or the extension of time for, performance of the obligations affected by the force majeure. An excuse of, or extension of the time for performance of, the obligations affected by the force majeure does not, of itself, excuse or extend the time for performance of any other obligation.

97. If Marathon elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so no later than 15 Days after receipt of the EPA's notice. In any such proceeding, Marathon has the burden of proving that it is entitled to relief under Paragraph 92, that its proposed excuse or extension was or will be warranted under the circumstances, and that it complied with the requirements of Paragraphs 93-94. If Marathon carries this burden, the delay or non-performance at issue shall be deemed not to be a violation by Marathon of the affected obligation of this Consent Decree identified to the EPA and the Court.

## XI. DISPUTE RESOLUTION

98. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section are the exclusive mechanism to resolve disputes arising under or with respect to this Decree.

99. Informal Dispute Resolution. 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 Marathon sends DOJ and the EPA a written Notice of Dispute. Such Notice of Dispute shall clearly state the matter in dispute. The period of informal negotiations shall not exceed 20 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 shall be considered binding unless, within 14 Days after the conclusion of the informal negotiation period, Marathon invokes formal dispute resolution procedures as set forth below.

100. Formal Dispute Resolution. Marathon shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ and the EPA 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 Marathon's position and any supporting documentation relied upon by Marathon.

101. The United States will send Marathon a Statement of Position within 45 Days of receipt of Marathon'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 Marathon unless Marathon files a motion for judicial review of the dispute in accordance with the following Paragraph.

102. Judicial Dispute Resolution. Marathon may seek judicial review of the dispute by filing with the Court and serving on the United States a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Business Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Marathon'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.

103. The United States shall respond to Marathon's motion within the time period allowed by the Local Rules of this Court. Marathon may file a reply memorandum, to the extent permitted by the Local Rules.

104. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 100 (Formal Dispute Resolution) pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by the 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, Marathon 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.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in



any other dispute brought under Paragraph 100 (Formal Dispute Resolution), Marathon shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

105. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant 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 86. If Marathon does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

## **XII. INFORMATION COLLECTION AND RETENTION**

106. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any Well Pad or New Well Pad covered by this Consent Decree, at all reasonable times (subject to any applicable federal health and safety laws and regulations), upon presentation of credentials, to:

- a. Monitor the progress of activities required under this Decree;
- b. Verify any data or information submitted to the United States in accordance with the terms of this Decree;
- c. Obtain samples and, upon request, splits or duplicates of any samples taken by Marathon or its representatives, contractors, or consultants related to activities under this Decree;
- d. Obtain documentary evidence, including photographs and similar data related to activities required under this Decree; and

e. Assess Marathon's compliance with this Decree.

107. Upon request, Marathon shall provide the EPA or its authorized representatives, splits or duplicates of any samples taken by Marathon. Upon request, the EPA shall provide Marathon splits or duplicates of any samples taken by the EPA.

108. Until five years after the termination of this Consent Decree, Marathon 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 Marathon's performance of its obligations under this Decree. This information-retention requirement applies regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Marathon shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

109. At the conclusion of the information-retention period provided in the preceding Paragraph, Marathon shall notify the United States 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, Marathon shall deliver any such documents, records, or other information to the EPA.

110. Marathon 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 Marathon 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 Marathon. 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.

111. Marathon 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. As to any information that Marathon seeks to protect as CBI, Marathon shall follow the procedures set forth in 40 C.F.R. Part 2.

112. 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 pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Marathon to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

### **XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS**

113. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the Date of Lodging.

114. The United States reserves 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 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 113. The United States further reserves 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, Marathon's Well Pads or New Well Pads, whether related to the violations addressed in this Decree or otherwise.

115. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, or other appropriate relief relating to the Well Pads or New Well Pads or Marathon's violations, Marathon 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 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 113.

116. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Marathon is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Marathon's compliance with this 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 does not, by its consent to the entry of this Decree, warrant or aver in any manner that Marathon's compliance with any aspect of this Decree will result in compliance with provisions of the Act, or with any other provisions of federal, State, or local laws, regulations, or permits.

117. This Consent Decree does not limit or affect the rights of Marathon or of the United States against any third parties, not party to this Decree, nor does it limit the rights of third parties, not party to this Decree, against Marathon, except as otherwise provided by law.

118. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Decree.

#### XIV. COSTS

119. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States 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 Marathon.

#### XV. NOTICES

120. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Decree, they shall be made in writing and sent by mail or email, with a preference for email, and addressed as follows:

As to DOJ by email (preferred): [eesdcopy.enrd@usdoj.gov](mailto:eesdcopy.enrd@usdoj.gov)  
Re: DJ # 90-5-2-1-10388/4

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 # 90-5-2-1-10388/4

As to the EPA by email (preferred): [R8AirReportEnforcement@epa.gov](mailto:R8AirReportEnforcement@epa.gov)  
[stovern.michael@epa.gov](mailto:stovern.michael@epa.gov)

As to the EPA by mail: Branch Chief, Air & Toxics Enforcement Branch  
Enforcement and Compliance Assurance Division  
Environmental Protection Agency, Region 8  
1595 Wynkoop Street  
Denver, CO 80202

As to Marathon by email: [cperessini@marathonoil.com](mailto:cperessini@marathonoil.com)

Scott.Janoe@BakerBotts.com

As to Marathon by mail:

Marathon Oil Company  
Attn: Celia Peressini  
990 Town and Country Blvd.  
Houston, TX 77024

Baker Botts LLP  
Attn: Scott Janoe  
910 Louisiana Street  
Houston, TX 77002

As to MHA Nation:

salbeston@mhanation.com (Energy Division  
Compliance Department)  
[klyson@mhanation.com](mailto:klyson@mhanation.com) (Energy Division  
Compliance Department)  
edmundbaker@mhanation.com (Environmental  
Division of the Natural Resources  
Department)  
lhlonefight@mhanation.com (Tribal Science Advisor)

121. Any Party may, by written notice to the other Party, change its designated notice recipient or notice address provided above. The MHA Nation may change the individuals to receive notice on its behalf by providing written notice to Marathon of such change.

122. 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. An email is presumed to have been received on the day it is sent.

## **XVI. SALES OR TRANSFERS OF OPERATIONS**

123. No sale or transfer of an operational interest in, or the operation of, any well associated with a Tank System or LEAF Tank System shall relieve Marathon of its obligations to ensure that the terms of the Consent Decree are implemented unless and until the Court has approved a modification pursuant to Section XX (Modification) of this Consent Decree

substituting the third party as a party to this Consent Decree with respect to the well(s) and associated Tank System(s) or LEAF Tank System(s) that are the subject of the sale or transfer.

124. If Marathon proposes to sell or transfer ownership or operation, in whole or in part, of any well associated with a Tank System or LEAF Tank System covered by this Consent Decree to a third party unaffiliated with Marathon, Marathon shall, at least 30 Days prior to the sale or transfer: (a) notify the United States of the proposed sale or transfer and of any specific Consent Decree provisions that Marathon proposes the transferee assume; (b) certify that the transferee is contractually bound to assume the obligations and liabilities of the Consent Decree; and (c) submit a certified statement from the transferee describing how the transferee has both the financial and technical ability to assume the obligations and liabilities of the Consent Decree.

125. No earlier than 30 Days after giving notice of a proposed sale or transfer pursuant to Paragraph 124, Marathon may file a motion with the Court to modify this Consent Decree in accordance with Section XX (Modification) to substitute the third party as a defendant with respect to the terms and conditions of this Consent Decree specifically relating to the well(s) and associated Tank System(s) or LEAF Tank System(s) sold or transferred. Any such motion to modify must demonstrate that the transferee has the financial and technical ability to assume the obligations and liabilities under this Consent Decree, and must specifically establish, as between Marathon and the third party, their respective responsibilities for compliance with the requirements of this Consent Decree.

126. This Consent Decree shall not be construed to impede the transfer of an operational interest in, or the operation of, any well associated with a Tank System or a LEAF Tank System to a third party unaffiliated with Marathon so long as the requirements of this Consent Decree are met.

127. Marathon may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Tank Systems or LEAF Tank Systems and associated well production assets, including the obligations set forth in Sections V (Environmental Mitigation Projects) and VII (Civil Penalty).

## **XVII. PLUGGING AND ABANDONMENT**

128. The permanent plugging and abandonment (“P&A”) of a well in accordance with applicable regulatory requirements and the requirements of this Section XVII (Plugging and Abandonment) shall be deemed to satisfy all requirements of this Consent Decree applicable to the well and Tank System or LEAF Tank System servicing that well. If the Tank System or LEAF Tank System is servicing wells that have not been plugged and abandoned, the provisions of this Paragraph do not apply.

129. To P&A a well, Marathon must:

a. File with the appropriate regulatory agency (*i.e.*, the North Dakota Industrial Commission or the U.S. Bureau of Land Management, or both, as applicable) a Notice of Intent to Plug and Abandon a Well, which includes a downhole schematic setting forth the actions to be taken to cement off the producing formations (the “Downhole Work”);

b. Complete the Downhole Work;

c. After completing the Downhole Work, file a P&A Subsequent Report (“Subsequent Report”) with the appropriate regulatory agency confirming that the Downhole Work was completed.

130. After the regulatory agency’s receipt of the Subsequent Report, the well will be deemed to have been permanently plugged and abandoned. Marathon shall maintain copies of all



documentation required by this Paragraph for inspection and review by the EPA. Nothing herein shall preclude Marathon from reusing any equipment from a plugged and abandoned well.

#### **XVIII. EFFECTIVE DATE**

131. The Effective Date of this Consent Decree is 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; provided, however, that Marathon hereby agrees that it shall be bound to perform any specific duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Decree before entry, or the Court declines to enter the Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date terminates.

#### **XIX. RETENTION OF JURISDICTION**

132. The Court retains jurisdiction over this case until termination of this Consent Decree pursuant to Section XXI (Termination) for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XI (Dispute Resolution) and XX (Modification), or effectuating or enforcing compliance with the terms of this Decree.

#### **XX. MODIFICATION**

133. Except as otherwise set forth in Paragraph 25, 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 Decree, it is effective only upon approval by the Court.

134. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XI (Dispute Resolution), provided, however, that, instead of the burden of

proof provided by Paragraph 104 (Standard of Review), 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).

## **XXI. TERMINATION**

### **135. Partial Termination for Specific Well Pads or New Well Pads.**

a. Notwithstanding the provisions of Section XVI (Sales or Transfers of Operations), Marathon may request partial termination of the requirements of this Consent Decree with respect to Well Pads or New Well Pads which are to be transferred entirely from Marathon's operational control and that meet the criteria in Paragraph 135.b ("Request for Partial Termination").

b. Marathon may serve upon the United States a Request for Partial Termination after it has: (a) completed all applicable requirements of Section IV.A (Air Pollution Source Permitting) and obtained a federally enforceable permit for the Well Pad or New Well Pad; and (b) completed all applicable requirements of Section IV.D (Design Requirements), including an evaluation of PRDs and the Engineering Evaluation, and any necessary modifications identified as a result of the evaluations.

c. Such Request for Partial Termination shall be provided to the United States in writing and include all necessary supporting documentation, including the Certification of Completion Report submitted pursuant to the requirements of Appendix B, Paragraph 8 (Certification of Completion Report for Open Loop VCSs), Appendix C, Paragraph 4.b (Certification of Completion Report for Closed Loop VCSs), or Appendix D, Paragraph 4.b (LEAF Site Certification of Completion Report) as applicable. The Request for Partial Termination shall be certified in accordance with Paragraph 78

(Certification Statement).

d. Pursuant to this Paragraph 135, Marathon shall not submit more than three individual Requests for Partial Termination. Under no circumstances may Marathon seek Partial Termination for more than fifteen percent of Well Pads subject to this Consent Decree in Appendix A as of the Effective Date.

136. Termination of this Consent Decree. After Marathon has: (a) completed the requirements of Section IV (Injunctive Relief) and Section V (Environmental Mitigation Projects); (b) maintained satisfactory compliance with this Consent Decree for a period of at least two years after the Certification of Completion Reports for all Tank Systems or LEAF Tank Systems listed in Appendix A are submitted; (c) paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree; (d) applied for all required federally enforceable permits incorporating the requirements set forth in Paragraph 10 (Federally Enforceable Permit Conditions); and (e) obtained all required federally enforceable permits incorporating the requirements set forth in Paragraph 10 (Federally Enforceable Permit Conditions), Marathon may serve upon the United States a Request for Termination, stating that Marathon has satisfied those requirements, together with all necessary supporting documentation. The Request for Termination shall be certified in accordance with Paragraph 78 (Certification Statement).

137. If Marathon has satisfied all requirements of Paragraph 136 (a) through (d), but has not obtained all required federally enforceable permits, Marathon may serve upon the United States a one-time Request for Partial Termination, seeking: (a) termination of the Consent Decree with respect to all Air Permit Facilities that have obtained the required federally enforceable permits pursuant to Section IV.A, Paragraph 7 (Synthetic Minor Permits for Well Pads and New Well Pads), Paragraph 8 (New Wells at Air Permit Facilities), or Paragraph 9

(General Permit); (b) termination of the Consent Decree requirements as to any New Well Pads constructed after the date of the Request for Partial Termination; and (c) for Well Pads and New Well Pads that have not obtained the required federally enforceable permits, partial termination of all requirements of the Consent Decree in Sections IV.C (Third-Party Audits); IV.D (Design Requirements); IV.E (Directed Inspection and Preventative Maintenance Program); IV.F (Periodic IR Camera Inspections); IV.G (Reliable Information, Investigation, and Corrective Action); IV.H (Tank System Electronic Pressure Monitoring) and V (Environmental Mitigation Projects), and related obligations under Section VIII (Periodic Reporting Requirements). The Request for Partial Termination shall state that Marathon has satisfied all requirements of Paragraph 136 (a) through (d), provide all necessary supporting documentation, and be certified in accordance with Paragraph 78 (Certification Statement).

138. Following receipt by the United States of Marathon's Request for Termination or Request for Partial Termination of this Consent Decree, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Marathon has satisfactorily complied with the requirements for termination, including documentation of compliance with and completion of each requirement. If the United States agrees that the Decree may be terminated, in whole or in part, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

139. If the United States does not agree that the Consent Decree may be terminated, in whole or in part, Marathon may invoke Dispute Resolution under Section XI (Dispute Resolution). However, Marathon shall not seek Dispute Resolution of any dispute regarding termination until 45 Days after service of its Request for Termination or its Request for Partial Termination.

## **XXII. PUBLIC PARTICIPATION**

140. This Consent Decree will 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 reserves the right to withdraw or withhold its consent if the comments regarding this Decree disclose facts or considerations indicating that this Decree is inappropriate, improper, or inadequate. Marathon consents to entry of this Decree without further notice and agrees not to withdraw from or oppose entry of this Decree by the Court or to challenge any provision of this Decree, unless the United States has notified Marathon in writing that it no longer supports entry of this Decree.

## **XXIII. SIGNATORIES/SERVICE**

141. Each undersigned representative of Marathon 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.

142. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Marathon 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 service of a summons. Marathon need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Decree.

## **XXIV. INTEGRATION**

143. This Consent Decree, including deliverables that are subsequently approved pursuant to this Decree, constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein.

## **XXV. 26 U.S.C. § 162(f)(2)(A)(ii) IDENTIFICATION**

144. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of Section II (Applicability), Paragraph 4; Section IV.A (Air Pollution Source Permitting), Paragraphs 7-11; Section IV.B (Air Pollution Source Management System and Verification of Emissions), Paragraphs 12-18; Section IV.C (Third-Party Audits), Paragraphs 19-24; Section IV.D (Design Requirements), Paragraphs 25-28; Section IV.E (Directed Inspection and Preventative Maintenance Program), Paragraphs 29-32; Section IV.F (Periodic IR Camera Inspections), Paragraphs 33-44; Section IV.H (Tank System Electronic Pressure Monitoring), Paragraphs 45-51; Section IV.I (Other Requirements), Paragraphs 53-55; Section V (Environmental Mitigation Projects), Paragraphs 57-62; Section VI (Injunctive Relief and Mitigation Project Submittals), Paragraphs 63-65; Section VIII (Periodic Reporting Requirements), Paragraphs 74, 75, 76, and 78; Section XII (Information Collection and Retention), Paragraphs 106-108; and Appendices A-F is restitution, remediation, or required to come into compliance with law.

**XXVI. HEADINGS**

145. Headings to the Sections, Subsections, and Paragraphs of this Consent Decree are provided for convenience and do not affect the meaning or interpretation of the provisions of this Consent Decree.

**XXVII. FINAL JUDGMENT**

146. Upon approval and entry of this Consent Decree by the Court, this Consent Decree constitutes a final judgment of the Court as to the United States and Marathon.

**XXVIII. APPENDICES**

147. The following Appendices are attached to and part of this Consent Decree:

- Appendix A Well Pads Subject to Consent Decree
- Appendix B Requirements for Open Loop Vapor Control Systems: Pressurized Liquid Sampling, Open Loop Modeling Guideline, Engineering Design Standards, Field Survey, Engineering Evaluation and Modification, and Initial Verification, and Post-Certification of Completion Modifications
- Appendix C Requirements for Closed Loop Vapor Control Systems: Design Guideline, Field Survey, Engineering Evaluation, and Initial Verification
- Appendix D Requirements for Lowest Emission Automated Facility Design and Verification
- Appendix E Environmental Mitigation Projects
- Appendix F Consent Decree Deadline Table

Dated and entered this \_\_\_ day of \_\_\_\_\_, 2024

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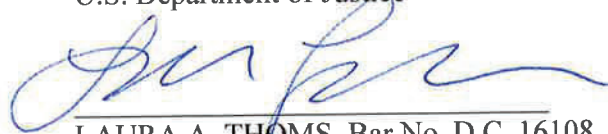
UNITED STATES DISTRICT JUDGE  
DISTRICT OF NORTH DAKOTA

THE UNDERSIGNED PARTY enters into this Consent Decree in this action captioned United States v. Marathon Oil Company.

FOR THE UNITED STATES OF AMERICA:

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

Date: 7/10/24



LAURA A. THOMS, Bar No. D.C. 16108  
Assistant Section Chief

VANESSA MOORE, Bar No. D.C. 1617837  
JONAH P. BROWN, Bar No. MT 50670720  
Trial Attorneys

Environmental Enforcement Section  
Environment & Natural Resources Division  
United States Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044



THE UNDERSIGNED PARTY enters into this Consent Decree in this action captioned United States v. Marathon Oil Company.

**FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:**

Becker,  
Kathleen

Digitally signed by  
Becker, Kathleen  
Date: 2024.06.21  
10:45:37 -06'00'

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KATHLEEN BECKER  
Regional Administrator  
U.S. Environmental Protection Agency, Region 8

KENNETH  
SCHEFSKI

Digitally signed by  
KENNETH SCHEFSKI  
Date: 2024.06.13  
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KENNETH C. SCHEFSKI  
Regional Counsel  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 8

SUZANNE  
BOHAN

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Date: 2024.06.13  
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SUZANNE J. BOHAN  
Division Director, Enforcement and Compliance Assurance  
Division  
U.S. Environmental Protection Agency, Region 8

LAUREN  
HAMMOND

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LAUREN HAMMOND  
Date: 2024.06.06  
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LAUREN R. HAMMOND  
Senior Assistant Regional Counsel  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region

THE UNDERSIGNED PARTY enters into this Consent Decree in this action captioned United States v. Marathon Oil Company.

**FOR THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY**

Date: \_\_\_\_\_

**DAVID  
UHLMANN** Digitally signed by DAVID  
UHLMANN  
Date: 2024.06.20  
13:40:34 -04'00'

DAVID M. UHLMANN  
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TERESA DYKES  
Attorney Advisor, Air Enforcement Division  
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U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue  
Washington, D.C. 20460

THE UNDERSIGNED PARTY enters into this Consent Decree in this action captioned United States v. Marathon Oil Company.

FOR MARATHON:

Date: 6/4/24

  
\_\_\_\_\_  
M.A. HENDERSON  
Executive Vice President  
Marathon Oil Company

## **APPENDIX A**

### **Well Pads Subject to Consent Decree**

## Appendix A: Well Pads Subject to Consent Decree

FBIR												
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design
TV1005	FP1005	FN1005	APN1039	21112	AISENBREY CTB	AISENBREY PAD	AISENBREY PAD	AISENBREY CTB	AISENBREY 21-25H	3306101799	2	Closed Loop
TV1005	FP1005	FN1005	APN1039	22446	AISENBREY CTB	AISENBREY PAD	AISENBREY PAD	AISENBREY CTB	AISENBREY 21-25TFH	3306102035	2	Closed Loop
TV1005	FP1005	FN1005	APN1039	29596	AISENBREY CTB	AISENBREY PAD	AISENBREY PAD	AISENBREY CTB	PALMER 31-25TFH	3306103334	2	Closed Loop
TV1012	FP1012	FN1013	APN1001	33926	ANNIE USA CTB	ANNIE USA PAD	ANNIE USA PAD	ANNIE USA CTB	CANTRILL USA 11-29TFH	3305308136	1	Open Loop
TV1012	FP1012	FN1013	APN1001	26086	ANNIE USA CTB	GOODALL USA PAD	ANNIE USA PAD	ANNIE USA CTB	CHUCK QUALE USA 21-29H	3305305163	1	Open Loop
TV1012	FP1012	FN1013	APN1001	26085	ANNIE USA CTB	ANNIE USA PAD	ANNIE USA PAD	ANNIE USA CTB	SCOTT QUALE USA 21-29TFH	3305305162	1	Open Loop
TV1015	FP1242	FN1016	APN1002	36429	ARDIS USA CTB	ARDIS USA PAD	PENNINGTON USA 31 PAD	ARDIS USA CTB	ARDIS USA 21-4TFH	3306104480	1	Open Loop
TV1015	FP1242	FN1016	APN1002	36430	ARDIS USA CTB	ARDIS USA PAD	PENNINGTON USA 31 PAD	ARDIS USA CTB	BINTZ USA 21-4TFH	3306104481	1	Open Loop
TV1015	FP1242	FN1016	APN1002	36431	ARDIS USA CTB	ARDIS USA PAD	PENNINGTON USA 31 PAD	ARDIS USA CTB	ERICKSON 31-4H	3306104482	1	Open Loop
TV1015	FP1242	FN1016	APN1002	36804	ARDIS USA CTB	ARDIS USA PAD	PENNINGTON USA 31 PAD	ARDIS USA CTB	FLOYD USA 21-4H	3306104483	1	Open Loop
TV1015	FP1242	FN1016	APN1002	21436	ARDIS USA CTB	PENNINGTON USA 31 PAD	PENNINGTON 31 PAD	ARDIS USA CTB	PENNINGTON 31-4TFH	3306101870	1	Open Loop
TV1015	FP1242	FN1016	APN1002	16772	ARDIS USA CTB	PENNINGTON 41 PAD	PENNINGTON 31 PAD	ARDIS USA CTB	PENNINGTON 41-4H	3306100563	1	Open Loop
TV1015	FP1242	FN1016	APN1002	20495	ARDIS USA CTB	PENNINGTON USA 31 PAD	PENNINGTON 31 PAD	ARDIS USA CTB	PENNINGTON USA 31-4H	3306101692	1	Open Loop
TV1015	FP1242	FN1016	APN1002	26805	ARDIS USA CTB	EARL PENNINGTON USA PAD	PENNINGTON 31 PAD	ARDIS USA CTB	RENN 41-4TFH	3306102775	1	Open Loop
TV1018	FP1017	FN1019	APN1040	18040	ARVID BANGEN USA CTB	ARVID BANGEN USA PAD	ARVID BANGEN USA PAD	ARVID BANGEN USA CTB	ARVID BANGEN USA 31-18H	3306101004	2	Open Loop
TV1018	FP1017	FN1019	APN1040	38001	ARVID BANGEN USA CTB	ARVID BANGEN USA PAD	ARVID BANGEN USA PAD	ARVID BANGEN USA CTB	BLACKBURN USA 41-18TFH	3306104842	2	Open Loop
TV1018	FP1017	FN1019	APN1040	38000	ARVID BANGEN USA CTB	ARVID BANGEN USA PAD	ARVID BANGEN USA PAD	ARVID BANGEN USA CTB	BOWMAN USA 41-18H	3306104841	2	Open Loop
TV1388	FP1353	FN1430	APN1120	40129	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	ASHLEY USA 43-5H	3306105223	CD, IV A.7.c.(1)	LEAF
TV1388	FP1353	FN1430	APN1120	40130	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	BONNIE USA 42-5TFH	3306105224	CD, IV A.7.c.(1)	LEAF
TV1388	FP1353	FN1430	APN1120	40131	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	NEWMAN USA 42-5H	3306105225	CD, IV A.7.c.(1)	LEAF
TV1388	FP1353	FN1430	APN1120	40132	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	ROGERS USA 42-5TFH-2B	3306105226	CD, IV A.7.c.(1)	LEAF
TV1388	FP1353	FN1430	APN1120	40133	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	LINDER USA 41-5H	3306105227	CD, IV A.7.c.(1)	LEAF
TV1388	FP1353	FN1430	APN1120	40134	ASHLEY USA CTB	ASHLEY USA PAD	ASHLEY USA PAD	ASHLEY USA CTB	REINHOLD USA 41-5TFH-2B	3306105228	CD, IV A.7.c.(1)	LEAF
TV1020	FP1018	FN1021	APN1003	33940	AXELL USA CTB-SIBYL USA 44-19TFH	AXELL USA PAD	AXELL USA PAD	AXELL USA CTB	AXELL USA 34-19TFH	3306104119	1	Open Loop
TV1020	FP1018	FN1021	APN1003	17568	AXELL USA CTB-SIBYL USA 44-19TFH	CHARLES SHOBE USA PAD	AXELL USA PAD	AXELL USA CTB	CHARLES SHOBE USA 44-19H	3306100849	1	Open Loop
TV1020	FP1018	FN1021	APN1003	33942	AXELL USA CTB-SIBYL USA 44-19TFH	AXELL USA PAD	AXELL USA PAD	AXELL USA CTB	MCDONALD USA 44-19H	3306104121	1	Open Loop
TV1020	FP1018	FN1021	APN1003	33941	AXELL USA CTB-SIBYL USA 44-19TFH	AXELL USA PAD	AXELL USA PAD	AXELL USA CTB	RUE USA 44-19TFH	3306104120	1	Open Loop
TV1020	FP1018	FN1021	APN1003	33943	AXELL USA CTB-SIBYL USA 44-19TFH	AXELL USA PAD	AXELL USA PAD	SIBYL USA 44-19TFH	SIBYL USA 44-19TFH	3306104122	1	Open Loop
TV1021	FP1019	FN1022	APN1076	25898	AZURE USA CTB	AZURE USA PAD	AZURE USA PAD	AZURE USA CTB	AZURE USA 31-15H	3302502191	3	Closed Loop
TV1021	FP1019	FN1022	APN1076	25897	AZURE USA CTB	AZURE USA PAD	AZURE USA PAD	AZURE USA CTB	CHASE USA 21-15H	3302502190	3	Closed Loop
TV1021	FP1019	FN1022	APN1076	26063	AZURE USA CTB	AZURE USA PAD	AZURE USA PAD	AZURE USA CTB	SWIFT EAGLE USA 31-15TFH	3302502218	3	Closed Loop
TV1021	FP1019	FN1022	APN1076	26062	AZURE USA CTB	AZURE USA PAD	AZURE USA PAD	AZURE USA CTB	TWO CROW USA 21-15TFH	3302502217	3	Closed Loop
TV1022	FP1020	FN1023	APN1004	22113	BAKER USA CTB	BAKER USA PAD	BAKER USA PAD	BAKER USA CTB	BAKER USA 11-18H	3306101967	1	Open Loop
TV1022	FP1020	FN1023	APN1004	22114	BAKER USA CTB	BAKER USA PAD	BAKER USA PAD	BAKER USA CTB	BAKER USA 11-18TFH	3306101968	1	Open Loop
TV1022	FP1020	FN1023	APN1004	34450	BAKER USA CTB	BURSHIA USA PAD	BAKER USA PAD	BAKER USA CTB	BERRY USA 21-18H	3306104163	1	Open Loop
TV1022	FP1020	FN1023	APN1004	34449	BAKER USA CTB	BURSHIA USA PAD	BAKER USA PAD	BAKER USA CTB	GRANT USA 21-18TFH	3306104162	1	Open Loop
TV1022	FP1020	FN1023	APN1004	34451	BAKER USA CTB	BURSHIA USA PAD	BAKER USA PAD	BAKER USA CTB	GREYBULL USA 31-18TFH	3306104164	1	Open Loop
TV1024	FP1022	FN1025	APN1114	23162	BEAR DEN USA CTB	BEAR DEN PAD	BEAR DEN PAD	BEAR DEN USA CTB	BEAR DEN 42-5TFH	3302501773	3	Closed Loop
TV1024	FP1022	FN1025	APN1114	23163	BEAR DEN USA CTB	BEAR DEN PAD	BEAR DEN PAD	BEAR DEN USA CTB	ROSS 42-5H	3302501774	3	Closed Loop
TV1024	FP1022	FN1025	APN1114	32517	BEAR DEN USA CTB	BEAR DEN PAD	BEAR DEN PAD	BEAR DEN USA CTB	RYAN 42-5TFH	3302503123	3	Closed Loop
TV1024	FP1022	FN1025	APN1114	32518	BEAR DEN USA CTB	BEAR DEN PAD	BEAR DEN PAD	BEAR DEN USA CTB	STRUTHERS USA 41-5H	3302503124	3	Closed Loop
TV1025	FP1023	FN1026	APN1074	20824	BEARS GHOST USA 31 CTB-GODDARD USA 41-4TFH	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 CTB	BEARS GHOST USA 31-4H	3302501371	3	Closed Loop
TV1025	FP1023	FN1026	APN1074	21949	BEARS GHOST USA 31 CTB-GODDARD USA 41-4TFH	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 CTB	BEARS GHOST USA 31-4TFH	3302504447	3	Closed Loop
TV1025	FP1023	FN1026	APN1074	37973	BEARS GHOST USA 31 CTB-GODDARD USA 41-4TFH	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 CTB	EDYTH USA 41-4H	3306104105	3	Closed Loop
TV1025	FP1023	FN1135	APN1074	38026	BEARS GHOST USA 31 CTB-GODDARD USA 41-4TFH	BEARS GHOST USA 31 PAD	BEARS GHOST USA 31 PAD	GODDARD USA 41-4TFH	GODDARD USA 41-4TFH	3302504129	3	Closed Loop
TV1033	FP1284	FN1035	APN1032	33664	BIG HEAD USA CTB-BIRDS BILL USA 41-2TFH	STARK PAD	STARK PAD	BIG HEAD USA CTB	BEARS ARM USA 41-2H	3306104061	1	Open Loop
TV1033	FP1284	FN1035	APN1032	33430	BIG HEAD USA CTB-BIRDS BILL USA 41-2TFH	STARK PAD	STARK PAD	BIG HEAD USA CTB	BIG HEAD USA 41-2TFH	3306104026	1	Open Loop
TV1033	FP1284	FN1037	APN1032	33431	BIG HEAD USA CTB-BIRDS BILL USA 41-2TFH	STARK PAD	STARK PAD	BIRDS BILL USA 41-2TFH	BIRDS BILL USA 41-2TFH	3306104027	1	Open Loop
TV1034	FP1033	FN1036	APN1005	30682	BINGO CTB	BINGO PAD	BINGO PAD	BINGO CTB	BINGO 24-10TFH	3306103580	1	Open Loop
TV1034	FP1033	FN1036	APN1005	30684	BINGO CTB	BINGO PAD	BINGO PAD	BINGO CTB	CHARLIE 24-10H	3302503582	1	Open Loop
TV1034	FP1033	FN1036	APN1005	30683	BINGO CTB	BINGO PAD	BINGO PAD	BINGO CTB	JL SHOBE 24-10TFH	3306103581	1	Open Loop
TV1034	FP1033	FN1036	APN1005	30681	BINGO CTB	BINGO PAD	BINGO PAD	BINGO CTB	MARJORIE 14-10H	3306103579	1	Open Loop
TV1035	FP1084	FN1098	APN1082	21765	BLACK HAWK USA 31-16H-DRIVER USA 34-9H	DRIVER USA PAD	DRIVER USA PAD	BLACK HAWK USA 31-16H	BLACK HAWK USA 31-16H	3305500158	3	Closed Loop
TV1035	FP1084	FN1098	APN1082	21764	BLACK HAWK USA 31-16H-DRIVER USA 34-9H	DRIVER USA PAD	DRIVER USA PAD	DRIVER USA 34-9H	DRIVER USA 34-9H	3305500157	3	Closed Loop
TV1041	FP1038	FN1044	APN1078	20974	BOY CHIEF USA 11-15TFH	BOY CHIEF USA PAD	BOY CHIEF USA CTB PAD	BOY CHIEF USA CTB	BOY CHIEF USA 11-15TFH	3302501396	3	Closed Loop
TV1042	FP1040	FN1046	APN1043	29172	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	BERLIN 41-25H	3306103259	2	Open Loop
TV1042	FP1040	FN1046	APN1043	18153	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	BRODAHL 31-25H	3306101048	2	Open Loop
TV1042	FP1040	FN1046	APN1043	28268	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	DICKEY 11-30TFH	3306103092	2	Open Loop
TV1042	FP1040	FN1046	APN1043	28271	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	ELWOOD 41-25TFH	3306103095	2	Open Loop
TV1042	FP1040	FN1046	APN1043	28269	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	MORITZ 11-30H	3306103093	2	Open Loop
TV1042	FP1040	FN1046	APN1043	28270	BRODAHL CTB	BRODAHL PAD	BRODAHL PAD	BRODAHL CTB	ZOOK 41-25TFH	3306103094	2	Open Loop
TV1046	FP1044	FN1050	APN1115	19667	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	BUFFALO 34-12H	3302501178	3	Closed Loop
TV1046	FP1044	FN1050	APN1115	19666	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	ELK CREEK USA 33-12H	3302501177	3	Closed Loop
TV1046	FP1044	FN1050	APN1115	29004	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	GULBRAND USA 44-12TFH	3302502624	3	Closed Loop
TV1046	FP1044	FN1050	APN1115	28263	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	MOREAN USA 34-12H	3302502523	3	Closed Loop
TV1046	FP1044	FN1050	APN1115	28262	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	PIPER 34-12H	3302502522	3	Closed Loop
TV1046	FP1044	FN1050	APN1115	29003	BUFFALO-ELK CREEK USA CTB	BUFFALO PAD	BUFFALO PAD	BUFFALO-ELK CREEK USA CTB	VICTOR USA 34-12TFH	3302502623	3	Closed Loop
TV1047	FP1116	FN1051	APN1051	37777	BULLS EYE USA CTB	GLISAR PAD	GLISAR PAD	BULLS EYE USA CTB	BULLS EYE USA 41-6TFH	3306104792	2	Open Loop
TV1047	FP1116	FN1051	APN1051	37778	BULLS EYE USA CTB	GLISAR PAD	GLISAR PAD	BULLS EYE USA CTB	NORMAN USA 11-5H	3306104793	2	Open Loop
TV1048	FP1045	FN1052	APN1004	34507	BURSHIA USA CTB	BURSHIA USA PAD	BURSHIA USA PAD	BURSHIA USA CTB	BURSHIA USA 14-7H	3306104171	1	Open Loop
TV1048	FP1045	FN1052	APN1004	34508	BURSHIA USA CTB	BURSHIA USA PAD	BURSHIA USA PAD	BURSHIA USA CTB	DEARBORN USA 24-7TFH	3306104172	1	Open Loop
TV1048	FP1045	FN1052	APN1004	34509	BURSHIA USA CTB	BURSHIA USA PAD	BURSHIA USA PAD	BURSHIA USA CTB	MCKINLEY USA 24-7TFH	3306104173	1	Open Loop
TV1048	FP1045	FN1052	APN1004	34510	BURSHIA USA CTB	BURSHIA USA PAD	BURSHIA USA PAD	BURSHIA USA CTB	MONTEAU USA 34-7H	3306104174	1	Open Loop
TV1052	FP1048	FN1056	APN1006	37612	CAVANAUGH USA 11-35TFH	CAVANAUGH USA PAD	CAVANAUGH USA PAD	CAVANAUGH USA 11-35TFH	CAVANAUGH USA 11-35TFH	3305309441	1	Open Loop
TV1055	FP1051	FN1059	APN1079	24379	CHARGING USA 42-35H-HUBER USA 41-2H	CHARGING USA PAD	CHARGING USA PAD	CHARGING USA 42-35H	CHARGING USA 42-35H	3302501989	3	Closed Loop
TV1055	FP1051	FN1184	APN1079	24545	CHARGING USA 42-35H-HUBER USA 41-2H	HUBER USA PAD	CHARGING USA PAD	HUBER USA 41-2H	HUBER USA 41-2H	3302502017	3	Closed Loop
TV1058	FP1054	FN1062	APN1007	33982	CLARA USA CTB-MICHELLE USA CTB	CLARA USA PAD	CLARA USA PAD	CLARA USA CTB	CLARA USA 11-23TFH-2B	3305308160	1	Open Loop
TV1058	FP1054	FN1259	APN1007	33980	CLARA USA CTB-MICHELLE USA CTB	CLARA USA PAD	CLARA USA PAD	MICHELLE USA CTB	MICHELLE USA 14-14TFH	3305308158	1	Open Loop
TV1058	FP1054	FN1259	APN1007	33981	CLARA USA CTB-MICHELLE USA CTB	CLARA USA PAD	CLARA USA PAD	MICHELLE USA CTB	PHYLLIS USA 11-23H	3305308159	1	Open Loop
TV1058	FP1054	FN1062	APN1007	21172	CLARA USA CTB-MICHELLE USA CTB	CLARA USA PAD	CLARA USA PAD	CLARA USA CTB	TAT USA 12-23H	3305303677	1	Open Loop
TV1060	FP1056	FN1064	APN1006	37611	CLARKS CREEK USA CTB	CAVANAUGH USA PAD	CLARKS CREEK USA CTB PAD	CLARKS CREEK USA CTB	ARCHER USA 13-35TFH	3305309440	1	Open Loop
TV1060	FP1056	FN1064	APN1006	37610	CLARKS CREEK USA CTB	CAVANAUGH USA PAD	CLARKS CREEK USA CTB PAD	CLARKS CREEK USA CTB	BLACK USA 11-35H	3305309439	1	Open Loop
TV1060	FP1056	FN1064	APN1006	31057	CLARKS CREEK USA CTB	CLARKS CREEK USA PAD	CLARKS CREEK USA CTB PAD	CLARKS CREEK USA CTB	CHARMAINE USA 14-35TFH	330530686		

## Appendix A: Well Pads Subject to Consent Decree

FBIR												
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design
TV1377	FP1346	FN1421	APN1116	39100	COLLINS USA CTB	COLLINS USA CTB	COLLINS USA PAD	COLLINS USA PAD	DENNIS USA 44-5H	3302504507	3	LEAF
TV1377	FP1346	FN1421	APN1116	39101	COLLINS USA CTB	COLLINS USA CTB	COLLINS USA PAD	COLLINS USA PAD	VELMA USA 44-5TFH	3302504508	3	LEAF
TV1385	FP1061	FN1428	APN1044	25100	CORA 2 CTB	CORA PAD	CORA PAD	CORA 2 CTB	CORA 31-14TFH	3306102452	1	LEAF
TV1385	FP1061	FN1428	APN1044	25101	CORA 2 CTB	CORA PAD	CORA PAD	CORA 2 CTB	MARTIN 31-14H	3306102453	1	LEAF
TV1385	FP1061	FN1428	APN1044	25102	CORA 2 CTB	CORA PAD	CORA PAD	CORA 2 CTB	RUTH MARTIN 21-14TFH	3306102454	1	LEAF
TV1385	FP1061	FN1428	APN1044	25842	CORA 2 CTB	MARLAND PAD	CORA PAD	CORA 2 CTB	JODI AUBOL 41-14H	3306102615	1	LEAF
TV1385	FP1061	FN1428	APN1044	25485	CORA 2 CTB	MARLAND PAD	CORA PAD	CORA 2 CTB	KARI 11-13TFH	3306102541	1	LEAF
TV1385	FP1061	FN1428	APN1044	25487	CORA 2 CTB	MARLAND PAD	CORA PAD	CORA 2 CTB	MARLAND 41-14TFH	3306102543	1	LEAF
TV1385	FP1061	FN1428	APN1044	40324	CORA 2 CTB	MARLAND PAD	CORA PAD	CORA 2 CTB	WESTERDAHL 41-14H	3306105271	1	LEAF
TV1385	FP1061	FN1428	APN1044	21351	CORA 2 CTB	OSTLUND PAD	CORA PAD	CORA 2 CTB	OSTLUND 11-14H	3306101848	1	LEAF
TV1385	FP1061	FN1428	APN1044	21590	CORA 2 CTB	OSTLUND PAD	CORA PAD	CORA 2 CTB	OSTLUND 11-14TFH	3306101891	1	LEAF
TV1065	FP1085	FN1070	APN1083	31950	CROSBY USA 41-6H	EAGLE USA PAD	EAGLE USA PAD	CROSBY USA 41-6H	CROSBY USA 41-6H	3302503005	3	Open Loop
TV1066	FP1063	FN1071	APN1008	19473	CROW FLIES HIGH USA CTB	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA CTB	CROW FLIES HIGH USA 31-4H	3305303248	1	Open Loop
TV1066	FP1063	FN1071	APN1008	36860	CROW FLIES HIGH USA CTB	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA CTB	PAPA GEORGE USA 41-4H	3305309178	1	Open Loop
TV1066	FP1063	FN1071	APN1008	36859	CROW FLIES HIGH USA CTB	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA PAD	CROW FLIES HIGH USA CTB	ROCK WOMAN USA 41-4TFH	3305309177	1	Open Loop
TV1067	FP1064	FN1072	APN1045	24012	CUMMINGS USA CTB	CUMMINGS USA PAD	CUMMINGS USA PAD	CUMMINGS USA CTB	CUMMINGS USA 41-6H	3306102291	2	Open Loop
TV1067	FP1064	FN1072	APN1045	24010	CUMMINGS USA CTB	CUMMINGS USA PAD	CUMMINGS USA PAD	CUMMINGS USA CTB	CUMMINGS USA 41-6TFH	3306102289	2	Open Loop
TV1067	FP1064	FN1072	APN1045	20139	CUMMINGS USA CTB	RHODA PAD	CUMMINGS USA PAD	CUMMINGS USA CTB	OREN USA 31-6TFH	3306101624	2	Open Loop
TV1074	FP1246	FN1079	APN1098	26757	DARREL QUALE USA CTB	DARREL QUALE USA PAD	QUALE USA PAD	DARREL QUALE USA CTB	CHEETAH USA 14-16TFH	3305305317	3	Closed Loop
TV1074	FP1246	FN1079	APN1098	23799	DARREL QUALE USA CTB	DARREL QUALE USA PAD	QUALE USA PAD	DARREL QUALE USA CTB	DARREL QUALE USA 14-16H	3305304397	3	Closed Loop
TV1074	FP1246	FN1079	APN1098	26576	DARREL QUALE USA CTB	DARREL QUALE USA PAD	QUALE USA PAD	DARREL QUALE USA CTB	FLICKA USA 13-16TFH	3305305318	3	Closed Loop
TV1081	FP1077	FN1086	APN1081	37735	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	AMSLER USA 13-26H	3305309500	2	Open Loop
TV1081	FP1077	FN1086	APN1081	19638	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA 12-26H	3305303330	2	Open Loop
TV1081	FP1077	FN1086	APN1081	37736	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	IVerson USA 14-26TFH	3305309501	2	Open Loop
TV1081	FP1077	FN1086	APN1081	37733	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	KAYE USA 13-26H	3305309498	2	Open Loop
TV1081	FP1077	FN1086	APN1081	37734	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	LARRY USA 13-26TFH	3305309499	2	Open Loop
TV1081	FP1077	FN1086	APN1081	37737	DEBBIE BAKLENKO USA CTB	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA PAD	DEBBIE BAKLENKO USA CTB	REDETZKE USA 14-26H	3305309502	2	Open Loop
TV1082	FP1078	FN1087	APN1117	21840	DEEP CREEK USA CTB	DEEP CREEK USA PAD	DEEP CREEK USA PAD	DEEP CREEK USA CTB	DEEP CREEK 21-13TFH	3302501538	3	Closed Loop
TV1082	FP1078	FN1087	APN1117	21837	DEEP CREEK USA CTB	DEEP CREEK USA PAD	DEEP CREEK USA PAD	DEEP CREEK USA CTB	DEEP CREEK USA 14-12TFH	3302501533	3	Closed Loop
TV1082	FP1078	FN1087	APN1117	32434	DEEP CREEK USA CTB	DEEP CREEK USA PAD	DEEP CREEK USA PAD	DEEP CREEK USA CTB	STILLWELL 21-19H	3302503101	3	Open Loop
TV1086	FP1082	FN1092	APN1009	35331	DIETRICH USA CTB-TOMMERDAHL USA CTB	DIETRICH USA PAD	DIETRICH USA PAD	DIETRICH USA CTB	DIETRICH USA 11-2TFH	3306104266	1	Open Loop
TV1086	FP1082	FN1092	APN1009	35333	DIETRICH USA CTB-TOMMERDAHL USA CTB	DIETRICH USA PAD	DIETRICH USA PAD	DIETRICH USA CTB	TOMMERDAHL USA 11-2TFH	3306104268	1	Open Loop
TV1086	FP1082	FN1092	APN1009	35330	DIETRICH USA CTB-TOMMERDAHL USA CTB	DIETRICH USA PAD	DIETRICH USA PAD	DIETRICH USA CTB	HOLMGREN 41-3H	3306104265	1	Open Loop
TV1086	FP1082	FN1092	APN1009	35332	DIETRICH USA CTB-TOMMERDAHL USA CTB	DIETRICH USA PAD	DIETRICH USA PAD	DIETRICH USA CTB	TOMMERDAHL USA 11-2H	3306104267	1	Open Loop
TV1088	FP1033	FN1094	APN1005	35421	DORIS USA CTB	BINGO PAD	BINGO PAD	DORIS USA CTB	BINGO USA 31-15TFH	3306104285	1	Open Loop
TV1088	FP1033	FN1094	APN1005	35423	DORIS USA CTB	BINGO PAD	BINGO PAD	DORIS USA CTB	DORIS USA 21-15TFH	3306104287	1	Open Loop
TV1088	FP1033	FN1094	APN1005	35422	DORIS USA CTB	BINGO PAD	BINGO PAD	DORIS USA CTB	ESTHER USA 21-15H	3306104286	1	Open Loop
TV1088	FP1033	FN1094	APN1005	35424	DORIS USA CTB	BINGO PAD	BINGO PAD	DORIS USA CTB	FRANCES USA 11-15H	3306104288	1	Open Loop
TV1089	FP1283	FN1095	APN1031	36662	DOVEN USA CTB-SURA USA 44-21TFH	SKOGSTAD PAD	SKOGSTAD PAD	DOVEN USA CTB	DOVEN 11-27TFH	3306104521	1	Open Loop
TV1089	FP1283	FN1095	APN1031	36663	DOVEN USA CTB-SURA USA 44-21TFH	SKOGSTAD PAD	SKOGSTAD PAD	SURA USA 44-21TFH	SURA USA 44-21TFH	3306104522	3	Open Loop
TV1089	FP1283	FN1095	APN1031	36661	DOVEN USA CTB-SURA USA 44-21TFH	SKOGSTAD PAD	SKOGSTAD PAD	DOVEN USA CTB	THOEN 41-28H	3306104520	1	Open Loop
TV1090	FP1085	FN1097	APN1083	23802	EAGLE USA 41-5H	EAGLE USA PAD	EAGLE USA PAD	EAGLE USA 41-5H	EAGLE USA 41-5H	3302501867	3	Closed Loop
TV1091	FP1086	FN1098	APN1002	26807	EARL PENNINGTON USA 44-33H-TOLLEFSON 41-4H	EARL PENNINGTON USA PAD	EARL PENNINGTON USA PAD	EARL PENNINGTON USA 44-33H	EARL PENNINGTON USA 44-33H	3306102777	1	Open Loop
TV1091	FP1086	FN1098	APN1002	26806	EARL PENNINGTON USA 44-33H-TOLLEFSON 41-4H	EARL PENNINGTON USA PAD	EARL PENNINGTON USA PAD	TOLLEFSON 41-4H	TOLLEFSON 41-4H	3306102776	1	Open Loop
TV1097	FP1091	FN1104	APN1046	26644	ELK USA CTB	BIG EAGLE USA PAD	ELK USA PAD	ELK USA CTB	BIG EAGLE USA 41-17TFH	3306102759	2	Open Loop
TV1097	FP1091	FN1104	APN1046	28156	ELK USA CTB	BIG EAGLE USA PAD	ELK USA PAD	ELK USA CTB	CONKLIN USA 31-17H	3306103079	2	Open Loop
TV1097	FP1091	FN1104	APN1046	19181	ELK USA CTB	ELK USA PAD	ELK USA PAD	ELK USA CTB	ELK USA 11-17H	3306101404	2	Open Loop
TV1097	FP1091	FN1104	APN1046	28158	ELK USA CTB	BIG EAGLE USA PAD	ELK USA PAD	ELK USA CTB	LONGORIA USA 21-17H	3306103081	2	Open Loop
TV1097	FP1091	FN1104	APN1046	28157	ELK USA CTB	BIG EAGLE USA PAD	ELK USA PAD	ELK USA CTB	SNOW BIRD USA 31-17TFH	3306103080	2	Open Loop
TV1097	FP1091	FN1104	APN1046	37782	ELK USA CTB	ELK USA PAD	ELK USA PAD	ELK USA CTB	SPENCER USA 11-17TFH	3306104796	2	Open Loop
TV1097	FP1091	FN1104	APN1046	28159	ELK USA CTB	BIG EAGLE USA PAD	ELK USA PAD	ELK USA CTB	WHEELER USA 21-17TFH	3306103082	2	Open Loop
TV1105	FP1098	FN1113	APN1047	18880	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41-6H	3306101323	2	Open Loop
TV1105	FP1098	FN1113	APN1047	37772	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	LITTLE OWL USA 31-6TFH	3306104789	2	Open Loop
TV1105	FP1098	FN1113	APN1047	37770	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	MADEL USA 21-6TFH	3306104787	2	Open Loop
TV1105	FP1098	FN1113	APN1047	37774	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	ODELL USA 41-6H	3306104791	2	Open Loop
TV1105	FP1098	FN1113	APN1047	37773	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	PERRY USA 41-6TFH	3306104790	2	Open Loop
TV1105	FP1098	FN1113	APN1047	37771	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	PLENTY HORNS USA 31-6H	3306104788	2	Open Loop
TV1106	FP1098	FN1113	APN1047	21243	EVERETT FISHER USA 41 CTB	JESSICA USA PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	EVERETT FISHER USA 31-6H	3306101839	2	Open Loop
TV1106	FP1098	FN1113	APN1047	21245	EVERETT FISHER USA 41 CTB	JESSICA USA PAD	EVERETT FISHER USA 41 PAD	EVERETT FISHER USA 41 CTB	JESSICA USA 21-6TFH	3306101872	2	Open Loop
TV1368	FP1340	FN1411	APN1113	38225	FOOLISH BEAR USA CTB-HERZIG USA 11-16H	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	FOOLISH BEAR USA 11-16H	3305309674	3	LEAF
TV1368	FP1340	FN1411	APN1113	38226	FOOLISH BEAR USA CTB-HERZIG USA 11-16H	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	COLEMAN USA 11-16TFH	3305309675	3	LEAF
TV1368	FP1340	FN1412	APN1113	38227	FOOLISH BEAR USA CTB-HERZIG USA 11-16H	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	FOOLISH BEAR USA PAD	HERZIG USA 11-16H	3305309676	3	LEAF
TV1112	FP1104	FN1120	APN1084	35631	FOUR BEARS USA CTB	FOUR BEARS USA PAD	FOUR BEARS USA PAD	FOUR BEARS USA CTB	EAGER USA 12-16TFH	3305308779	3	Closed Loop
TV1112	FP1104	FN1120	APN1084	35630	FOUR BEARS USA CTB	FOUR BEARS USA PAD	FOUR BEARS USA PAD	FOUR BEARS USA CTB	FOUR BEARS USA 13-16H	3305308778	3	Closed Loop
TV1112	FP1104	FN1120	APN1084	35633	FOUR BEARS USA CTB	FOUR BEARS USA PAD	FOUR BEARS USA PAD	FOUR BEARS USA CTB	PERKINS USA 12-16TFH	3305308781	3	Closed Loop
TV1112	FP1104	FN1120	APN1084	35632	FOUR BEARS USA CTB	FOUR BEARS USA PAD	FOUR BEARS USA PAD	FOUR BEARS USA CTB	WALDORF USA 12-16H	3305308780	3	Closed Loop
TV1114	FP1106	FN1122	APN1085	24429	FREDERICKS USA 43-26H	FREDERICKS USA PAD	FREDERICKS USA PAD	FREDERICKS USA 43-26H	FREDERICKS USA 43-26H	3302502002	3	Closed Loop
TV1115	FP1107	FN1123	APN1086	19085	GALEN FOX USA 24-7H	GALEN FOX USA PAD	GALEN FOX USA PAD	GALEN FOX USA 24-7H	GALEN FOX USA 24-7H	3306101398	2	Closed Loop
TV1117	FP1109	FN1125	APN1086	24309	GARY BELL USA 23-36H	GARY BELL USA PAD	GARY BELL USA PAD	GARY BELL USA 23-36H	GARY BELL USA 23-36H	3302501978	3	Closed Loop
TV1123	FP1114	FN1131	APN1050	36499	GLADYS USA CTB	GLADYS USA PAD	GLADYS USA PAD	GLADYS USA CTB	ALLEN HORN USA 11-2H	3306104497	1	Open Loop
TV1123	FP1114	FN1131	APN1050	18243	GLADYS USA CTB	GLADYS USA PAD	GLADYS USA PAD	GLADYS USA CTB	GLADYS USA 21-2H	3306101091	1	Open Loop
TV1123	FP1114	FN1131	APN1050	36340	GLADYS USA CTB	GLADYS USA PAD	GLADYS USA PAD	GLADYS USA CTB	HORN USA 21-2H	3306104460	1	Open Loop
TV1123	FP1114	FN1131	APN1050	36338	GLADYS USA CTB	GLADYS USA PAD	GLADYS USA PAD	GLADYS USA CTB	JULIA HORN USA 11-2TFH	3306104458	1	Open Loop
TV1123	FP1114	FN1131	APN1050	36339	GLADYS USA CTB	GLADYS USA PAD	GLADYS USA PAD	GLADYS USA CTB	LOTTIO HORN USA 21-2TFH	3306104459	1	Open Loop
TV1123	FP1114	FN1131	APN1050	21466	GLADYS USA CTB	WILLIAM USA PAD	GLADYS USA PAD	GLADYS USA CTB	WILLIAM USA 31-2H	3306101877	1	Open Loop
TV1123	FP1114	FN1131	APN1050	23209	GLADYS USA CTB	WILLIAM USA PAD	GLADYS USA PAD	GLADYS USA CTB	WILLIAM USA 31-2TFH	3306102173	1	Open Loop
TV1126	FP1117	FN1136	APN1011	30513	GOLDBERG USA CTB	GOLDBERG USA PAD	GOLDBERG USA PAD	GOLDBERG USA CTB	ANTON 34-33TFH	3306103525	1	Open Loop
TV1126	FP1117	FN1136	APN1011	30512	GOLDBERG USA CTB	GOLDBERG USA PAD	GOLDBERG USA PAD	GOLDBERG USA CTB	GANNON 34-33H	3306103524	1	Open Loop
TV1126	FP1117	FN1136	APN1011	30511	GOLDBERG USA CTB	GOLDBERG USA PAD	GOLDBERG USA PAD	GOLDBERG USA CTB	GOLDBERG USA 24-33TFH	3306103523	1	Open Loop
TV1126	FP1117	FN1136	APN1011	31849	GOLDBERG USA CTB	GOLDBERG USA PAD	GOLDBERG USA PAD	GOLDBERG USA CTB	RONALD 34-33TFH-2B	3306103804	1	Open Loop
TV1127	FP1118	FN1137	APN1087	37475	GOOD BEAR USA CTB	FOX USA PAD	GOOD BEAR USA PAD	GOOD BEAR USA CTB	DANCING BULL USA 32-14TFH	3302504064	3	Closed Loop
TV1127	FP1118	FN1137	APN1087	27444	GOOD BEAR USA CTB	FOX USA PAD	GOOD BEAR USA PAD	GOOD BEAR USA CTB	FOX USA 14-1H	3302502035	3	Closed Loop
TV1127	FP1118	FN1137	APN1087	20642	GOOD BEAR USA CTB							

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FBIR												
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design
TV1132	FP1121	FN1142	APN1012	32455	GRADY USA CTB	GRADY USA PAD	GRADY USA PAD	GRADY USA CTB	CUNNINGHAM USA 31-4H	3305307475	1	Open Loop
TV1132	FP1121	FN1142	APN1012	32454	GRADY USA CTB	GRADY USA PAD	GRADY USA PAD	GRADY USA CTB	GARNESSE USA 31-4TFH-2B	3305307474	1	Open Loop
TV1132	FP1121	FN1142	APN1012	32452	GRADY USA CTB	GRADY USA PAD	GRADY USA PAD	GRADY USA CTB	GRADY USA 21-4H	3305307472	1	Open Loop
TV1132	FP1121	FN1142	APN1012	32453	GRADY USA CTB	GRADY USA PAD	GRADY USA PAD	GRADY USA CTB	MARCELLA USA 21-4TFH	3305307473	1	Open Loop
TV1136	FP1125	FN1149	APN1052	29760	HALVORSON CTB	HALVORSON PAD	HALVORSON PAD	HALVORSON CTB	HALVORSON 34-34TFH	3306103370	2	Open Loop
TV1136	FP1125	FN1149	APN1052	29759	HALVORSON CTB	HALVORSON PAD	HALVORSON PAD	HALVORSON CTB	STEINHAUS 24-34H	3306103369	2	Open Loop
TV1136	FP1125	FN1149	APN1052	29758	HALVORSON CTB	HALVORSON PAD	HALVORSON PAD	HALVORSON CTB	STEVENSON 24-34TFH	3306103368	2	Open Loop
TV1140	FP1129	FN1153	APN1061	37786	HARRINGTON USA CTB	HARRINGTON USA PAD	HARRINGTON USA PAD	HARRINGTON USA CTB	HARRINGTON USA 11-4H	3306104797	2	Open Loop
TV1140	FP1129	FN1153	APN1061	37787	HARRINGTON USA CTB	HARRINGTON USA PAD	HARRINGTON USA PAD	HARRINGTON USA CTB	WATTERBERG USA 41-5TFH	3306104798	2	Open Loop
TV1144	FP1133	FN1157	APN1052	29756	HENRY CHARGING USA 21 CTB	HOWARD USA PAD	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 CTB	ANNA PACKINEAU USA 21-3TFH	3306101196	2	Open Loop
TV1144	FP1133	FN1157	APN1052	37801	HENRY CHARGING USA 21 CTB	GRACIE USA PAD	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 CTB	BRUSSEAU USA 11-3TFH	3306104803	2	Open Loop
TV1144	FP1133	FN1157	APN1052	37800	HENRY CHARGING USA 21 CTB	GRACIE USA PAD	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 CTB	FLAGG USA 11-3H	3306104802	2	Open Loop
TV1144	FP1133	FN1157	APN1052	18378	HENRY CHARGING USA 21 CTB	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 CTB	HENRY CHARGING USA 21-3H	3306101145	2	Open Loop
TV1144	FP1133	FN1157	APN1052	29757	HENRY CHARGING USA 21 CTB	HALVORSON PAD	HENRY CHARGING USA 21 PAD	HENRY CHARGING USA 21 CTB	PACKINEAU USA 21-3H	3306103367	2	Open Loop
TV1145	FP1134	FN1158	APN1053	22640	HENRY CHARGING USA 41 CTB	HENRY CHARGING USA 41 PAD	HENRY CHARGING USA 41 PAD	HENRY CHARGING USA 41 CTB	HENRY CHARGING USA 31-3TFH	3306102069	2	Open Loop
TV1145	FP1134	FN1158	APN1053	21608	HENRY CHARGING USA 41 CTB	HENRY CHARGING USA 41 PAD	HENRY CHARGING USA 41 PAD	HENRY CHARGING USA 41 CTB	HENRY CHARGING USA 41-3H	3306101896	2	Open Loop
TV1149	FP1138	FN1163	APN1013	33666	HOWARD USA CTB	HOWARD USA PAD	HOWARD USA PAD	HOWARD USA CTB	DESERLY USA 11-1TFH	3306104063	1	Open Loop
TV1149	FP1138	FN1163	APN1013	33667	HOWARD USA CTB	HOWARD USA PAD	HOWARD USA PAD	HOWARD USA CTB	DUTTON USA 21-1TFH	3306104064	1	Open Loop
TV1149	FP1138	FN1163	APN1013	33668	HOWARD USA CTB	HOWARD USA PAD	HOWARD USA PAD	HOWARD USA CTB	FANNIE USA 21-1H	3306104065	1	Open Loop
TV1149	FP1138	FN1163	APN1013	18514	HOWARD USA CTB	HOWARD USA PAD	HOWARD USA PAD	HOWARD USA CTB	HOWARD USA 11-1H	3306101196	2	Open Loop
TV1149	FP1138	FN1163	APN1013	33665	HOWARD USA CTB	HOWARD USA PAD	HOWARD USA PAD	HOWARD USA CTB	WILKINSON USA 11-1H	3306104062	1	Open Loop
TV1151	FP1139	FN1090	APN1014	32865	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	DEMAYAR USA 41-2TFH	DEMAYAR USA 41-2TFH	3305307693	1	Open Loop
TV1151	FP1139	FN1090	APN1014	18471	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	HUNTS ALONG USA CTB	HUNTS ALONG USA 12-1H	3305303083	1	Open Loop
TV1151	FP1139	FN1090	APN1014	33492	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	HUNTS ALONG USA CTB	MAMIE USA 21-1TFH	3305307989	1	Open Loop
TV1151	FP1139	FN1090	APN1014	33493	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	HUNTS ALONG USA CTB	MARK USA 11-1H	3305307990	1	Open Loop
TV1151	FP1139	FN1090	APN1014	33491	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	HUNTS ALONG USA CTB	SHOOTS USA 41-2H	3305307988	1	Open Loop
TV1151	FP1139	FN1090	APN1014	33494	HUNTS ALONG USA CTB-DEMAYAR USA 41-2TFH-SHOOTS USA 41-2H	HUNTS ALONG USA PAD	HUNTS ALONG USA PAD	HUNTS ALONG USA CTB	TIMOTHY USA 11-1TFH-2B	3305307991	1	Open Loop
TV1155	FP1143	FN1171	APN1015	33638	IRISH USA CTB-GRETCHEN USA 11-30H	IRISH USA PAD	IRISH USA PAD	IRISH USA CTB	FOUR DANCES USA 41-25TFH	3305308049	1	Open Loop
TV1155	FP1143	FN1171	APN1015	33639	IRISH USA CTB-GRETCHEN USA 11-30H	IRISH USA PAD	IRISH USA PAD	GRETCHEN USA 11-30H	GRETCHEN USA 11-30H	3305308050	1	Open Loop
TV1155	FP1143	FN1171	APN1015	33636	IRISH USA CTB-GRETCHEN USA 11-30H	IRISH USA PAD	IRISH USA PAD	IRISH USA CTB	IRISH USA 41-25TFH	3305308047	1	Open Loop
TV1155	FP1143	FN1171	APN1015	33637	IRISH USA CTB-GRETCHEN USA 11-30H	IRISH USA PAD	IRISH USA PAD	IRISH USA CTB	SNOWMAN USA 41-25H	3305308048	1	Open Loop
TV1159	FP1146	FN1175	APN1010	34598	JACK PENNINGTON USA CTB	GERHARDT USA PAD	JACK PENNINGTON PAD	JACK PENNINGTON USA CTB	HANLON USA 11-28TFH	3306104201	1	Open Loop
TV1159	FP1146	FN1175	APN1010	16778	JACK PENNINGTON USA CTB	JACK PENNINGTON PAD	JACK PENNINGTON PAD	JACK PENNINGTON USA CTB	JACK PENNINGTON 21-28H	3306100566	1	Open Loop
TV1161	FP1148	FN1178	APN1054	21503	JAHNKE USA CTB	JAHNKE USA PAD	JAHNKE USA PAD	JAHNKE USA CTB	JAHNKE USA 24-31H	3306101883	2	Closed Loop
TV1161	FP1148	FN1178	APN1054	21502	JAHNKE USA CTB	JAHNKE USA PAD	JAHNKE USA PAD	JAHNKE USA CTB	JAHNKE USA 24-31TFH	3306101882	2	Closed Loop
TV1162	FP1149	FN1179	APN1055	36920	JASPER L USA CTB	JASPER L USA PAD	JASPER L USA PAD	JASPER L USA CTB	ADONIAH USA 44-5TFH-2B	3306104592	2	Closed Loop
TV1162	FP1149	FN1179	APN1055	36919	JASPER L USA CTB	JASPER L USA PAD	JASPER L USA PAD	JASPER L USA CTB	KLEMSTEAD USA 44-5TFH	3306104591	2	Closed Loop
TV1162	FP1149	FN1179	APN1055	36918	JASPER L USA CTB	JASPER L USA PAD	JASPER L USA PAD	JASPER L USA CTB	KOLBO USA 34-5H	3306104590	2	Closed Loop
TV1162	FP1149	FN1179	APN1055	37515	JASPER L USA CTB	JASPER L USA PAD	JASPER L USA PAD	JASPER L USA CTB	PELARSKE USA 44-5TFH-2B	3306104717	2	Closed Loop
TV1163	FP1150	FN1180	APN1056	37675	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	COPELAND USA 34-31H	3306104768	2	Open Loop
TV1163	FP1150	FN1180	APN1056	37676	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	ETHERINGTON USA 34-31TFH	3306104765	2	Open Loop
TV1163	FP1150	FN1180	APN1056	37674	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	HARTSON USA 24-31H	3306104764	2	Open Loop
TV1163	FP1150	FN1180	APN1056	37673	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	HERMAN USA 24-31TFH	3306104763	2	Open Loop
TV1163	FP1150	FN1180	APN1056	17771	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	JAY SANDSTROM USA 34-31H	3306100909	2	Open Loop
TV1163	FP1150	FN1180	APN1056	37677	JAY SANDSTROM USA CTB	JAY SANDSTROM USA PAD	JAY SANDSTROM USA PAD	JAY SANDSTROM USA CTB	ORTMAN USA 34-31TFH	3306104767	2	Open Loop
TV1164	FP1151	FN1182	APN1016	34602	JERRY PENNINGTON USA CTB	GERHARDT USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	GERHARDT USA 14-21H	3306104205	1	Open Loop
TV1164	FP1151	FN1182	APN1016	34599	JERRY PENNINGTON USA CTB	GERHARDT USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	MICROBERTS USA 14-21TFH	3306104202	1	Open Loop
TV1164	FP1151	FN1182	APN1016	34601	JERRY PENNINGTON USA CTB	GERHARDT USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	SALVESON USA 24-21H	3306104204	1	Open Loop
TV1164	FP1151	FN1182	APN1016	34600	JERRY PENNINGTON USA CTB	GERHARDT USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	VERNE USA 24-21TFH	3306104203	1	Open Loop
TV1164	FP1151	FN1182	APN1016	36844	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	AKKO USA 44-21H	3306104561	1	Open Loop
TV1164	FP1151	FN1182	APN1016	36845	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	ASLAK USA 44-21TFH	3306104562	1	Open Loop
TV1164	FP1151	FN1182	APN1016	36846	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	DONAASON USA 34-21TFH	3306104563	1	Open Loop
TV1164	FP1151	FN1182	APN1016	17966	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA 34-21H	3306100982	1	Open Loop
TV1164	FP1151	FN1182	APN1016	36847	JERRY PENNINGTON USA CTB	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA PAD	JERRY PENNINGTON USA CTB	NOKELBY USA 34-21H	3306104564	1	Open Loop
TV1166	FP1153	FN1184	APN1001	24621	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	BOBBY LEE USA 41-30H	3305304673	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	24620	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	COBURN USA 41-30TFH	3305304672	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	22288	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	JOANNE QUALE USA 21-30H	3305303948	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	22289	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	JOANNE QUALE USA 21-30TFH	3305303949	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	33923	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	MALECKAR USA 31-30H	3305308133	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	34597	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	SHELDON USA 21-30TFH	3305308414	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	33924	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	SKADELAND USA 31-30TFH	3305308134	1	Closed Loop
TV1166	FP1153	FN1184	APN1001	33925	JOANNE QUALE USA CTB	JOANNE QUALE USA PAD	JOANNE QUALE USA PAD	JOANNE QUALE USA CTB	WENDELL USA 31-30H	3305308135	1	Closed Loop
TV1167	FP1154	FN1185	APN1058	37856	JOBA USA CTB	FISHER USA 21 PAD	JOBA USA PAD	JOBA USA CTB	EVANS USA 11-5TFH	3306104825	1	Open Loop
TV1167	FP1154	FN1185	APN1058	18230	JOBA USA CTB	FISHER USA 21 PAD	JOBA USA PAD	JOBA USA CTB	FISHER USA 21-5H	3306101085	1	Open Loop
TV1167	FP1154	FN1185	APN1058	37857	JOBA USA CTB	FISHER USA 21 PAD	JOBA USA PAD	JOBA USA CTB	MORGAN USA 21-5TFH	3306104826	1	Open Loop
TV1167	FP1154	FN1185	APN1058	20288	JOBA USA CTB	JOHNSON PAD	JOBA USA PAD	JOBA USA CTB	FISHER USA 41-5H	3306101657	1	Open Loop
TV1167	FP1154	FN1185	APN1058	37854	JOBA USA CTB	JOBA USA PAD	JOBA USA PAD	JOBA USA CTB	ALBERT USA 31-5TFH	3306104754	1	Open Loop
TV1167	FP1154	FN1185	APN1058	37856	JOBA USA CTB	JOBA USA PAD	JOBA USA PAD	JOBA USA CTB	HOWLING WOLF USA 31-5TFH	3306104756	1	Open Loop
TV1167	FP1154	FN1185	APN1058	37855	JOBA USA CTB	JOBA USA PAD	JOBA USA PAD	JOBA USA CTB	JOBA USA 31-5H	3306104755	1	Open Loop
TV1167	FP1154	FN1185	APN1058	37857	JOBA USA CTB	JOBA USA PAD	JOBA USA PAD	JOBA USA CTB	MEDICINE CROW USA 21-5H	3306104757	1	Open Loop
TV1171	FP1158	FN1190	APN1018	34101	JONES USA CTB	JULIA JONES USA PAD	JONES USA PAD	JONES USA CTB	BRIEK USA 13-14H	3305308224	1	Open Loop
TV1171	FP1158	FN1190	APN1018	29211	JONES USA CTB	DOLL USA PAD	JONES USA PAD	JONES USA CTB	DOLL USA 12-14H	3305306220	1	Open Loop
TV1171	FP1158	FN1190	APN1018	34103	JONES USA CTB	JULIA JONES USA PAD	JONES USA PAD	JONES USA CTB	DYE USA 14-14TFH-2B	3305308226	1	Open Loop
TV1171	FP1158	FN1190	APN1018	29209	JONES USA CTB	DOLL USA PAD	JONES USA PAD	JONES USA CTB	ERNESTINE USA 11-14TFH-2B	3305306218	1	Open Loop
TV1171	FP1158	FN1190	APN1018	34104	JONES USA CTB	JULIA JONES USA PAD	JONES USA PAD	JONES USA CTB	HAMMERBERG USA 14-14H	3305308227	1	Open Loop
TV1171	FP1158	FN1190	APN1018	19514	JONES USA CTB	JONES USA PAD	JONES USA PAD	JONES USA CTB	JONES USA 14-14H	3305303258	1	Open Loop
TV1171	FP1158	FN1190	APN1018	34102	JONES USA CTB	JULIA JONES USA PAD	JONES USA PAD	JONES USA CTB	JULIA JONES USA 13-14TFH	3305308225	1	Open Loop
TV1171	FP1158	FN1190	APN1018	29208	JONES USA CTB	DOLL USA PAD	JONES USA PAD	JONES USA CTB	LUN USA 11-14H	3305306217	1	Open Loop
TV1171	FP1158	FN1190	APN1018	34100	JONES USA CTB	JULIA JONES USA PAD	JONES USA PAD	JONES USA CTB	NORA JONES USA 12-14TFH-2B	3305308223	1	Open Loop
TV1171	FP1158	FN1190	APN1018	29210	JONES USA CTB	DOLL USA PAD	JONES USA PAD	JONES USA CTB	TONY LUN USA 12-14TFH	3305306219	1	Open Loop
TV1178	FP1086	FN1006	APN1002	33548	KATTEVOLD USA CTB-ALEXANDER USA 44-33TFH	EARL PENNINGTON USA PAD	EARL PENNINGTON USA PAD	ALEXANDER USA 44-33TFH	ALEXANDER USA 44-33TFH	3306104050	1	Open Loop
TV1178	FP1086	FN1197	APN1002	33550	KATTEVOLD USA CTB-ALEXANDER USA 44-33TFH	EARL PENNINGTON USA PAD	EARL PENNINGTON USA PAD	KATTEVOLD USA CTB	KATTEVOLD USA 14-34TFH	3306104052	1	Open Loop
TV1178	FP1086	FN1197										



## Appendix A: Well Pads Subject to Consent Decree

FBIR												
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design
TV1183	FP1168	FN1203	APN1019	32524	KERMIT USA CTB-IRON WOMAN USA 14-9H	KERMIT USA PAD	KERMIT USA PAD	KERMIT USA CTB	RENO USA 24-9TFH-2B	3305307506	1	Open Loop
TV1202	FP1219	FN1226	APN1023	31475	LACEY USA 11-5H-MOLINE 14-32H	MOLINE PAD	MOLINE PAD	LACEY USA 11-5H	3306103754	1	Open Loop	
TV1202	FP1219	FN1264	APN1023	31476	LACEY USA 11-5H-MOLINE 14-32H	MOLINE PAD	MOLINE PAD	MOLINE 14-32H	3306103755	1	Open Loop	
TV1205	FP1188	FN1225	APN1020	36922	LANG USA CTB-THORSON USA CTB	LANG USA PAD	LANG USA PAD	LANG USA CTB	3306104594	1	Open Loop	
TV1205	FP1188	FN1363	APN1020	37323	LANG USA CTB-THORSON USA CTB	LANG USA PAD	LANG USA PAD	THORSON USA CTB	OSCAR THORSON USA 41-8TFH-2B	3306104659	1	Open Loop
TV1205	FP1188	FN1363	APN1020	36923	LANG USA CTB-THORSON USA CTB	LANG USA PAD	LANG USA PAD	THORSON USA CTB	THORSON USA 41-8H	3306104595	1	Open Loop
TV1205	FP1188	FN1225	APN1020	36921	LANG USA CTB-THORSON USA CTB	LANG USA PAD	LANG USA PAD	LANG USA CTB	VICKALL USA 34-5H	3306104593	1	Open Loop
TV1206	FP1189	FN1226	APN1017	20287	LANTZ CTB	JOHNSON PAD	LANTZ PAD	LANTZ CTB	JOHNSON 44-32H	3306101656	1	Open Loop
TV1206	FP1189	FN1226	APN1017	27140	LANTZ CTB	LANTZ PAD	LANTZ PAD	LANTZ CTB	FREEBERG 34-32TFH	3306102851	1	Open Loop
TV1206	FP1189	FN1226	APN1017	27138	LANTZ CTB	LANTZ PAD	LANTZ PAD	LANTZ CTB	LANTZ 24-32TFH	3306102849	1	Open Loop
TV1206	FP1189	FN1226	APN1017	27139	LANTZ CTB	LANTZ PAD	LANTZ PAD	LANTZ CTB	SLOAN 34-32H	3306102850	1	Open Loop
TV1387	FP1352	FN1429	APN1119	40376	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	BECKER USA 34-32TFH	3306105282	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	40377	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	HULTBERG USA 34-32H	3306105283	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	40378	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	HUMBLE USA 44-32TFH	3306105284	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	40379	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	SPALDING USA 44-32H	3306105285	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	40380	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	THELMA USA 14-33TFH	3306105286	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	40400	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	DONKIN USA 14-33H	3306105298	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37834	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	BETTY LOU USA 14-33TFH	3306104807	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37835	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	LAVERNE USA 24-33H	3306104808	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37836	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	DUANE USA 24-35TFH	3306104809	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37837	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	LILLIAN USA 24-33H	3306104810	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37838	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	DAWSON USA 24-33TFH	3306104811	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37839	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	GLADHEIM USA 34-33H	3306104812	CD, IV A.7.c.(1)	LEAF
TV1387	FP1352	FN1429	APN1119	37840	LILLIAN USA CTB	LILLIAN USA PAD	LILLIAN USA PAD	LILLIAN USA CTB	OLIVE USA 34-33TFH	3306104813	CD, IV A.7.c.(1)	LEAF
TV1219	FP1200	FN1160	APN1089	24316	LINCOLN USA 16-1H-HOPKINS USA 15-2H	LINCOLN-HOPKINS USA PAD	LINCOLN-HOPKINS USA CTB PAD	HOPKINS USA 15-2H	HOPKINS USA 15-2H	3302501982	3	Closed Loop
TV1219	FP1200	FN1239	APN1089	24648	LINCOLN USA 16-1H-HOPKINS USA 15-2H	LINCOLN-HOPKINS USA PAD	LINCOLN-HOPKINS USA CTB PAD	LINCOLN USA 16-1H	LINCOLN USA 16-1H	3302502021	3	Closed Loop
TV1222	FP1204	FN1244	APN1090	21457	LUCKY ONE CTB	LUCKY ONE PAD	LUCKY ONE PAD	LUCKY ONE CTB	LUCKY ONE 21-2H	3306101874	2	Closed Loop
TV1222	FP1204	FN1244	APN1090	21199	LUCKY ONE CTB	LUCKY ONE PAD	LUCKY ONE PAD	LUCKY ONE CTB	LUCKY ONE 21-2TFH	3306101818	2	Closed Loop
TV1223	FP1205	FN1245	APN1021	35322	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	EUNICE USA 11-16TFH	3306104263	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	35321	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	LUTHER-WEIDMAN USA CTB	3306104262	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	35318	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	GARTLAND USA 31-16H	3306104259	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	34897	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	WEIDMAN USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	HURKES USA 41-16TFH	3306104227	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	34896	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	WEIDMAN USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	LINTON USA 31-16TFH	3306104226	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	19298	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	LUTHER USA 11-16H	3306101428	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	19299	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	LUTHER USA 31-16H	3306101429	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	35320	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	REYES USA 21-16H	3306104261	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	35319	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	LUTHER USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	SEARS USA 21-16TFH	3306104260	1	Closed Loop
TV1223	FP1205	FN1392	APN1021	34899	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	WEIDMAN USA PAD	LUTHER-WEIDMAN USA CTB PAD	WEIDMAN USA 11-15TFH	WEIDMAN USA 11-15TFH	3306104229	1	Closed Loop
TV1223	FP1205	FN1245	APN1021	34898	LUTHER-WEIDMAN USA CTB-WEIDMAN USA 11-15TFH	WEIDMAN USA PAD	LUTHER-WEIDMAN USA CTB PAD	LUTHER-WEIDMAN USA CTB	WHITE OWL USA 41-16H	3306104228	1	Closed Loop
TV1224	FP1206	FN1246	APN1022	37283	MANDAN USA CTB-MARION 44-10TFH	DOLL USA PAD	MANDAN USA CTB PAD	MANDAN USA CTB	DRACSWOLF USA 34-10TFH	3305309323	1	Open Loop
TV1224	FP1206	FN1246	APN1022	37282	MANDAN USA CTB-MARION 44-10TFH	DOLL USA PAD	MANDAN USA CTB PAD	MANDAN USA CTB	JACOBSON USA 44-10H	3305309326	1	Open Loop
TV1224	FP1206	FN1246	APN1022	37284	MANDAN USA CTB-MARION 44-10TFH	DOLL USA PAD	MANDAN USA CTB PAD	MANDAN USA CTB	MANDAN USA 34-10H	3305309325	1	Open Loop
TV1224	FP1206	FN1247	APN1022	37283	MANDAN USA CTB-MARION 44-10TFH	DOLL USA PAD	MANDAN USA CTB PAD	MARION USA 44-10TFH	MARION USA 44-10TFH	3305309324	1	Open Loop
TV1224	FP1206	FN1246	APN1022	37286	MANDAN USA CTB-MARION 44-10TFH	DOLL USA PAD	MANDAN USA CTB PAD	MANDAN USA CTB	STRAND USA 44-10TFH-2B	3305309327	1	Open Loop
TV1225	FP1207	FN1248	APN1060	17502	MARK SANDSTROM 14-32H	MARK SANDSTROM PAD	MARK SANDSTROM PAD	MARK SANDSTROM 14-32H	MARK SANDSTROM 14-32H	3306100821	2	Open Loop
TV1229	FP1211	FN1253	APN1092	32050	MARTINEZ USA 24-8H	MARTINEZ USA PAD	MARTINEZ USA PAD	MARTINEZ USA 24-8H	MARTINEZ USA 24-8H	3302503025	3	Open Loop
TV1232	FP1118	FN1256	APN1087	28075	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	ANTHONY USA 23-14H	3302502507	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37744	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	EUGENE USA 33-14TFH	3302504063	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37743	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	GRINNEL USA 33-14H	3302504062	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	28076	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	HALE USA 23-14TFH	3302502508	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37741	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	LEON USA 33-14TFH	3302504060	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37742	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	MARIAN USA 33-14H	3302504061	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	24745	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	MELVAIN FOX USA 14-4TFH	3302502036	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37740	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	SYLVESTER USA 33-14H	3302504059	3	Closed Loop
TV1232	FP1118	FN1256	APN1087	37739	MELVAIN FOX USA CTB	FOX USA PAD	GOOD BEAR USA PAD	MELVAIN FOX USA CTB	WOLF USA 23-14TFH	3302504058	3	Closed Loop
TV1236	FP1217	FN1281	APN1062	30697	MIKKELSEN 11-14H	MIKKELSEN PAD	MIKKELSEN PAD	MIKKELSEN 11-14H	MIKKELSEN 11-14H	3306103585	2	Open Loop
TV1386	FP1351	FN1428	APN1118	40168	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	ANDIE USA 12-20H	3305310127	1	LEAF
TV1386	FP1351	FN1428	APN1118	40163	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	EMMA USA 13-20TFH	3305304122	1	LEAF
TV1386	FP1351	FN1428	APN1118	36395	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	HARRISON USA 12-20H	3305310125	1	LEAF
TV1386	FP1351	FN1428	APN1118	36395	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	LAWSON USA 11-20TFH	3305310128	1	LEAF
TV1386	FP1351	FN1428	APN1118	40164	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	MURRAY USA 13-20H	3305310123	1	LEAF
TV1386	FP1351	FN1428	APN1118	40161	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	ROBERTSON USA 14-20TFH	3305310120	1	LEAF
TV1386	FP1351	FN1428	APN1118	36396	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	STAR USA 11-20H	3305310129	1	LEAF
TV1386	FP1351	FN1428	APN1118	40165	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	STOUT USA 13-20TFH	3305310124	1	LEAF
TV1386	FP1351	FN1428	APN1118	40160	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	SUSIE USA 14-20H	3305310119	1	LEAF
TV1386	FP1351	FN1428	APN1118	40162	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	TARTAR USA 13-20H	3305310121	1	LEAF
TV1386	FP1351	FN1428	APN1118	40167	MURRAY USA CTB	MURRAY USA PAD	MURRAY USA PAD	MURRAY USA CTB	VONDALL USA 12-20TFH	3305310126	1	LEAF
TV1240	FP1157	FN1267	APN1017	36336	NAATUS USA CTB	JOHNSON PAD	JOHNSON PAD	NAATUS USA CTB	CALEB 44-32TFH	3306104456	1	Open Loop
TV1240	FP1157	FN1267	APN1017	36337	NAATUS USA CTB	JOHNSON PAD	JOHNSON PAD	NAATUS USA CTB	NAATUS USA 14-33H	3306104457	1	Open Loop
TV1244	FP1224	FN1271	APN1024	32028	NESS USA CTB	NESS USA PAD	NESS USA PAD	NESS USA CTB	BALLMEYER USA 41-17TFH	3306103841	1	Open Loop
TV1244	FP1224	FN1271	APN1024	32025	NESS USA CTB	NESS USA PAD	NESS USA PAD	NESS USA CTB	BECKY USA 21-17TFH	3306103838	1	Open Loop
TV1244	FP1224	FN1271	APN1024	32026	NESS USA CTB	NESS USA PAD	NESS USA PAD	NESS USA CTB	HANS USA 31-17TFH	3306103839	1	Open Loop
TV1244	FP1224	FN1271	APN1024	32024	NESS USA CTB	NESS USA PAD	NESS USA PAD	NESS USA CTB	NESS USA 31-17H	3306103837	1	Open Loop
TV1246	FP1226	FN1273	APN1025	17709	OATES CTB	BANGEN PAD	OATES PAD	OATES CTB	BANGEN 41-27H	3306100892	1	Open Loop
TV1246	FP1226	FN1273	APN1025	36789	OATES CTB	OATES PAD	OATES PAD	OATES CTB	OATES 21-27H	3306104546	1	Open Loop
TV1246	FP1226	FN1273	APN1025	36788	OATES CTB	OATES PAD	OATES PAD	OATES CTB	SENNESS 11-27TFH	3306104545	1	Open Loop
TV1246	FP1226	FN1273	APN1025	19834	OATES CTB	SHIRLEY PENNINGTON USA PAD	OATES PAD	OATES CTB	JACOB MADISON 11-27H	3306101550	1	Open Loop
TV1247	FP1017	FN1274	APN1040	37999	OLD BEAR USA CTB	ARVID BANGEN USA PAD	ARVID BANGEN USA PAD	OLD BEAR USA CTB	BURGER USA 41-18TFH	3306104840	2	Open Loop
TV1247	FP1017	FN1274	APN1040	37998	OLD BEAR USA CTB	ARVID BANGEN USA PAD	ARVID BANGEN USA PAD	OLD BEAR USA CTB	OLD BEAR USA 11-17H	3306104839	2	Open Loop
TV1249	FP1304	FN1276	APN1104	20274	ONE FEATHER USA 11-17H-TORGERSON USA 14-8H	TORGERSON USA PAD	TORGERSON USA PAD	ONE FEATHER USA 11-17H	ONE FEATHER USA 11-17H	3305500143	3	Closed Loop
TV1249	FP1304	FN1368	APN1104	19567	ONE FEATHER USA 11-17H-TORGERSON USA 14-8H	TORGERSON USA PAD	TORGERSON USA PAD	TORGERSON USA 14-8H	TORGERSON USA 14-8H	3305500141	3	Closed Loop
TV1252	FP1230	FN1280	APN1094	25346	ORVIN CTB	ORVIN PAD	ORVIN PAD	ORVIN CTB	ABNER 21-13TFH	3306102520	2	Closed Loop
TV1252	FP1230	FN1280	APN1094	25345	ORVIN CTB	ORVIN PAD	ORVIN PAD	ORVIN CTB	HUNSTAD 31-13H	3306102519	2	Closed Loop



## Appendix A: Well Pads Subject to Consent Decree

FBIR												
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design
TV1266	FP1327	FN1294	APN1036	36497	PETERSON USA CTB-ROYAL USA 41-3TFH	ROYAL USA PAD	WENINGER COX PAD	PETERSON USA CTB	EVENSON USA 41-3H	3306104495	1	Open Loop
TV1266	FP1327	FN1294	APN1036	36498	PETERSON USA CTB-ROYAL USA 41-3TFH	ROYAL USA PAD	WENINGER COX PAD	PETERSON USA CTB	PETERSON USA 41-3TFH	3306104496	1	Open Loop
TV1266	FP1327	FN1321	APN1036	36496	PETERSON USA CTB-ROYAL USA 41-3TFH	ROYAL USA PAD	WENINGER COX PAD	ROYAL USA 41-3TFH	ROYAL USA 41-3TFH	3306104494	1	Open Loop
TV1267	FP1244	FN1243	APN1097	27155	POINT USA 9-1H-LUCILLE USA 14-10H	POINT USA PAD	POINT USA PAD	LUCILLE USA 14-10H	LUCILLE USA 14-10H	3302502377	3	Closed Loop
TV1267	FP1244	FN1295	APN1097	24467	POINT USA 9-1H-LUCILLE USA 14-10H	POINT USA PAD	POINT USA PAD	POINT USA 9-1H	POINT USA 9-1H	3302502009	3	Closed Loop
TV1268	FP1245	FN1296	APN1026	36912	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	DANKS USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	DANKS USA 11-3H	3305303215	1	Open Loop
TV1268	FP1245	FN1296	APN1026	36915	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	ARDELLA USA 21-3TFH-2B	3305309198	1	Open Loop
TV1268	FP1245	FN1296	APN1026	36914	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	KEYS USA 21-3H	3305309197	1	Open Loop
TV1268	FP1245	FN1252	APN1026	36911	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	MARTHA USA 11-3H	MARTHA USA 11-3H	3305309194	1	Open Loop
TV1268	FP1245	FN1296	APN1026	36912	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	PRAIRIE CHICKEN USA 11-3TFH	3305309195	1	Open Loop
TV1268	FP1245	FN1296	APN1026	36927	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	WEASEL USA 11-3H	3305309202	1	Open Loop
TV1268	FP1245	FN1296	APN1026	36913	PRAIRIE CHICKEN USA CTB-MARTHA USA 11-3H	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA PAD	PRAIRIE CHICKEN USA CTB	ZANDRA USA 11-3TFH-2B	3305309196	1	Open Loop
TV1271	FP1248	FN1107	APN1063	20530	RANDI USA 41-17H-ELLA USA 11-16H	RANDI-ELLA USA PAD	RANDI-ELLA USA PAD	ELLA USA 11-16H	ELLA USA 11-16H	3306101698	2	Closed Loop
TV1271	FP1248	FN1299	APN1063	20529	RANDI USA 41-17H-ELLA USA 11-16H	RANDI-ELLA USA PAD	RANDI-ELLA USA PAD	RANDI USA 41-17H	RANDI USA 41-17H	3306101697	2	Closed Loop
TV1272	FP1249	FN1300	APN1027	32851	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	BRANT USA 44-34TFH	3306103966	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32010	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	COLVIN USA 14-34TFH	3306103831	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32015	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	HAL USA 34-34H	3306103836	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32014	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	JACKIE USA 34-34TFH	3306103835	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32850	RANGER USA CTB	WENINGER USA PAD	RANGER USA PAD	RANGER USA CTB	LOFTQUIST USA 34-34TFH	3306103965	1	Open Loop
TV1272	FP1249	FN1300	APN1027	33562	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	LUIS USA 14-34H	3306104055	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32011	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	MCMAHON USA 14-34H	3306103832	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32012	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	RANGER USA 24-34TFH	3306103833	1	Open Loop
TV1272	FP1249	FN1300	APN1027	32013	RANGER USA CTB	RANGER USA PAD	RANGER USA PAD	RANGER USA CTB	TONY USA 24-34H	3306103834	1	Open Loop
TV1272	FP1249	FN1300	APN1027	19064	RANGER USA CTB	WENINGER USA PAD	RANGER USA PAD	RANGER USA CTB	WENINGER USA 44-34H	3306101374	1	Open Loop
TV1273	FP1250	FN1301	APN1064	21478	RAYMOND USA CTB	MHA USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	MHA USA 11-4H	3306101879	2	Open Loop
TV1273	FP1250	FN1301	APN1064	21479	RAYMOND USA CTB	MHA USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	MHA USA 11-4TFH	3306101880	2	Open Loop
TV1273	FP1250	FN1301	APN1064	30516	RAYMOND USA CTB	GOLDBERG USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	HANNAH USA 31-4TFH	3306103528	2	Open Loop
TV1273	FP1250	FN1301	APN1064	37790	RAYMOND USA CTB	RAYMOND USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	KULLAND USA 41-4TFH	3306104799	2	Open Loop
TV1273	FP1250	FN1301	APN1064	37791	RAYMOND USA CTB	RAYMOND USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	LINDELY USA 41-4H	3306104800	2	Open Loop
TV1273	FP1250	FN1301	APN1064	30515	RAYMOND USA CTB	GOLDBERG USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	MACGIE USA 21-4H	3306103527	2	Open Loop
TV1273	FP1250	FN1301	APN1064	18191	RAYMOND USA CTB	RAYMOND USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	RAYMOND USA 41-4H	3306101068	2	Open Loop
TV1273	FP1250	FN1301	APN1064	30514	RAYMOND USA CTB	GOLDBERG USA PAD	RAYMOND USA PAD	RAYMOND USA CTB	RUFUS USA 21-4TFH	3306103526	2	Open Loop
TV1277	FP1254	FN1305	APN1028	34861	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	ATKINSON USA 31-17TFH	3306104224	1	Open Loop
TV1277	FP1254	FN1305	APN1028	34860	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	BRUHN USA 21-17H	3306104223	1	Open Loop
TV1277	FP1254	FN1305	APN1028	35323	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	DRIFTWOOD USA 41-17H	3306104264	1	Open Loop
TV1277	FP1254	FN1305	APN1028	34858	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	MIRIAM USA 11-17H	3306104221	1	Open Loop
TV1277	FP1254	FN1305	APN1028	20051	RED FEATHER USA CTB	RED FEATHER USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	RED FEATHER USA 21-17H	3306101613	1	Open Loop
TV1277	FP1254	FN1305	APN1028	20050	RED FEATHER USA CTB	RED FEATHER USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	RED FEATHER USA 31-17H	3306101612	1	Open Loop
TV1277	FP1254	FN1305	APN1028	34859	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	ROCHELLE USA 21-17TFH	3306104222	1	Open Loop
TV1277	FP1254	FN1305	APN1028	34862	RED FEATHER USA CTB	ATKINSON USA PAD	RED FEATHER USA PAD	RED FEATHER USA CTB	TURKEY FEET USA 41-17TFH	3306104225	1	Open Loop
TV1278	FP1114	FN1306	APN1050	26462	REED CTB	GLADYS USA PAD	GLADYS USA PAD	REED CTB	MYERS 24-35H	3306102719	1	Open Loop
TV1278	FP1114	FN1306	APN1050	26463	REED CTB	GLADYS USA PAD	GLADYS USA PAD	REED CTB	REED 24-35TFH	3306102720	1	Open Loop
TV1278	FP1114	FN1306	APN1050	26461	REED CTB	GLADYS USA PAD	GLADYS USA PAD	REED CTB	SKOLD 34-35TFH	3306102718	1	Open Loop
TV1278	FP1114	FN1306	APN1050	26660	REED CTB	WENINGER COX PAD	GLADYS USA PAD	REED CTB	JWC 44-34H	3306102765	1	Open Loop
TV1278	FP1114	FN1306	APN1050	21573	REED CTB	WENINGER COX PAD	GLADYS USA PAD	REED CTB	WENINGER COX 44-34TFH	3306101887	1	Open Loop
TV1284	FP1260	FN1312	APN1065	24011	RHODA CTB	CUMMINGS USA PAD	RHODA PAD	RHODA CTB	CUMMINGS 44-31TFH	3306102290	2	Open Loop
TV1284	FP1260	FN1312	APN1065	23563	RHODA CTB	DON PAD	RHODA PAD	RHODA CTB	DON 34-31TFH	3306102222	2	Open Loop
TV1284	FP1260	FN1312	APN1065	19958	RHODA CTB	RHODA PAD	RHODA PAD	RHODA CTB	RHODA 24-31H	3306101581	2	Open Loop
TV1284	FP1260	FN1312	APN1065	23564	RHODA CTB	RHODA PAD	RHODA PAD	RHODA CTB	STEVE 34-31H	3306102223	2	Open Loop
TV1285	FP1261	FN1313	APN1099	27838	RICHANDA USA CTB	RICHANDA USA PAD	RICHANDA USA PAD	RICHANDA USA CTB	BEARS GHOST USA 11-4H	3302502488	3	Closed Loop
TV1285	FP1261	FN1313	APN1099	27839	RICHANDA USA CTB	RICHANDA USA PAD	RICHANDA USA PAD	RICHANDA USA CTB	BEARS GHOST USA 11-4TFH	3302502489	3	Closed Loop
TV1285	FP1261	FN1313	APN1099	27837	RICHANDA USA CTB	RICHANDA USA PAD	RICHANDA USA PAD	RICHANDA USA CTB	RICHANDA USA 21-4TFH	3302502487	3	Closed Loop
TV1285	FP1261	FN1313	APN1099	27836	RICHANDA USA CTB	RICHANDA USA PAD	RICHANDA USA PAD	RICHANDA USA CTB	RICHANDA USA 21-4H	3302502486	3	Closed Loop
TV1286	FP1262	FN1314	APN1066	18042	RICHARD BANGEN 21-26H	RICHARD BANGEN PAD	RICHARD BANGEN PAD	RICHARD BANGEN 21-26H	RICHARD BANGEN 21-26H	3306101005	2	Closed Loop
TV1288	FP1264	FN1316	APN1067	19372	RMJK 31-26H	RMJK PAD	RMJK PAD	RMJK 31-26H	RMJK 31-26H	3306101444	2	Closed Loop
TV1293	FP1269	FN1322	APN1068	25544	RUDOLPH USA 41-15TFH-RUDOLPH 44-10TFH	RUDOLPH USA PAD	RUDOLPH USA PAD	RUDOLPH 44-10TFH	RUDOLPH 44-10TFH	3306102548	2	Closed Loop
TV1293	FP1269	FN1323	APN1068	25545	RUDOLPH USA 41-15TFH-RUDOLPH 44-10TFH	RUDOLPH USA PAD	RUDOLPH USA PAD	RUDOLPH USA 41-15TFH	RUDOLPH USA 41-15TFH	3306102549	2	Closed Loop
TV1302	FP1278	FN1332	APN1029	33413	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	CHAUNCEY USA 31-2H	3305307956	1	Open Loop
TV1302	FP1278	FN1332	APN1029	36221	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	DANIEL USA 11-2TFH-2B	3305308982	1	Open Loop
TV1302	FP1278	FN1332	APN1029	37089	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	JONAH USA 11-2H	3305309248	1	Open Loop
TV1302	FP1278	FN1332	APN1029	33415	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	JUNE USA 31-2H	3305307958	1	Open Loop
TV1302	FP1278	FN1332	APN1029	33416	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	MILES USA 41-2TFH-2B	3305307959	1	Open Loop
TV1302	FP1278	FN1332	APN1029	36222	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	MORSETTE USA 11-2H	3305308983	1	Open Loop
TV1302	FP1278	FN1332	APN1029	36223	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	SHERMAN USA 21-2TFH	3305308984	1	Open Loop
TV1302	FP1278	FN1332	APN1029	36224	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	VALARIE USA 11-2H	3305308985	1	Open Loop
TV1302	FP1278	FN1332	APN1029	33414	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	WILBUR USA 31-2TFH	3305307957	1	Open Loop
TV1302	FP1278	FN1332	APN1029	33412	SHERMAN USA CTB	SHERMAN USA PAD	SHERMAN USA PAD	SHERMAN USA CTB	WINONA USA 21-2TFH-2B	3305307955	1	Open Loop
TV1303	FP1279	FN1333	APN1025	16687	SHIRLEY PENNINGTON USA CTB	BOTTLESON PAD	SHIRLEY PENNINGTON USA PAD	SHIRLEY PENNINGTON USA CTB	BOTTLESON 34-22H	3306100548	2	Closed Loop
TV1303	FP1279	FN1333	APN1025	19833	SHIRLEY PENNINGTON USA CTB	SHIRLEY PENNINGTON USA PAD	SHIRLEY PENNINGTON USA PAD	SHIRLEY PENNINGTON USA CTB	SHIRLEY PENNINGTON USA 14-22H	3306101549	2	Closed Loop
TV1304	FP1280	FN1334	APN1101	33390	SHOBE USA CTB	NUGGET USA PAD	SHOBE USA PAD	SHOBE USA CTB	MARSHA GRUBE USA 14-20H	3306104016	2	Closed Loop
TV1304	FP1280	FN1334	APN1101	33391	SHOBE USA CTB	SHOBE USA PAD	SHOBE USA PAD	SHOBE USA CTB	NUGGET USA 14-20TFH	3306104017	2	Closed Loop
TV1304	FP1280	FN1334	APN1101	16686	SHOBE USA CTB	SHOBE USA PAD	SHOBE USA PAD	SHOBE USA CTB	SHOBE 24-20H	3306100547	2	Closed Loop
TV1305	FP1282	FN1277	APN1102	21852	SITTING OWL USA 34-8H-ONE FEATHER USA 31-17H	SITTING OWL USA PAD	SITTING OWL USA PAD	ONE FEATHER USA 31-17H	ONE FEATHER USA 31-17H	3305500160	3	Closed Loop
TV1305	FP1282	FN1338	APN1102	21853	SITTING OWL USA 34-8H-ONE FEATHER USA 31-17H	SITTING OWL USA PAD	SITTING OWL USA PAD	SITTING OWL USA 34-8H	SITTING OWL USA 34-8H	3305500161	3	Closed Loop
TV1306	FP1283	FN1339	APN1031	20122	SKOGSTAD 41-28H	SKOGSTAD PAD	SKOGSTAD PAD	SKOGSTAD 41-28H	SKOGSTAD 41-28H	3306101620	1	Open Loop
TV1307	FP1284	FN1340	APN1032	33346	STARK USA CTB	STARK PAD	STARK PAD	STARK CTB	HARLEY 14-36TFH	3306104002	1	Open Loop
TV1307	FP1284	FN1340	APN1032	33347	STARK USA CTB	STARK PAD	STARK PAD	STARK CTB	HOUSER 14-36H	3306104003	1	Open Loop
TV1307	FP1284	FN1340	APN1032	33345	STARK USA CTB	STARK PAD	STARK PAD	STARK CTB	LUND 44-35H	3306104001	1	Open Loop
TV1307	FP1284	FN1340	APN1032	31400	STARK USA CTB	STARK PAD	STARK PAD	STARK CTB	STARK 44-35TFH	3306103725	1	Open Loop
TV1318	FP1281	FN1336	APN1030	36660	SUNWALL USA CTB-SHORTALL USA 14-9H	SHORTALL USA PAD	SHORTALL USA PAD	SHORTALL USA 14-9H	SHORTALL USA 14-9H	3306104519	1	Open Loop
TV1318	FP1281	FN1351	APN1030	36659	SUNWALL USA CTB-SHORTALL USA 14-9H	SHORTALL USA PAD	SHORTALL USA PAD	SHORTALL USA CTB	SUNWALL USA 41-17H	3306104518	1	Open Loop
TV1318	FP1281	FN1351	APN1030	36798	SUNWALL USA CTB-SHORTALL USA 14-9H	SHORTALL USA PAD	SHORTALL USA PAD	SUNWALL USA CTB	WALSH USA 11-16TFH	3306104550	1	Open Loop
TV1320	FP1296	FN1355	APN1070	21458	TARA JO USA 34-12H-TARA JO USA 34-12TFH	TARA JO USA PAD	TARA JO USA PAD	TARA JO USA 34-12H	TARA JO USA 34-12H	3306101875	2	Closed Loop
TV1320	FP1296	FN1356	APN1070	23176	TARA JO USA 34-12H-TARA JO USA 34-12TFH	TARA JO USA PAD	TARA JO USA PAD	TARA JO USA 34-12TFH				

## Appendix A: Well Pads Subject to Consent Decree

FBIR													
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design	
TV1321	FP1297	FN1357	APN1033	32971	TAT USA 13 CTB-LOREN USA 14-23TFH	TAT USA 13 PAD	TAT USA 13 PAD	TAT USA 13 CTB	WHITEBODY USA 14-23H	3305307750	1	Open Loop	
TV1321	FP1297	FN1357	APN1033	34484	TAT USA 13 CTB-LOREN USA 14-23TFH	TAT USA 13 PAD	TAT USA 13 PAD	TAT USA 13 CTB	YELLOWFACE USA 13-23H	3305308368	1	Open Loop	
TV1322	FP1298	FN1358	APN1034	32891	TAT USA 34 CTB	TAT USA 34 PAD	TAT USA 34 PAD	TAT USA 34 CTB	BEGOLA USA 34-22H	3305307706	1	Open Loop	
TV1322	FP1298	FN1358	APN1034	32888	TAT USA 34 CTB	TAT USA 34 PAD	TAT USA 34 PAD	TAT USA 34 CTB	FORSMAN USA 44-22H	3305307703	1	Open Loop	
TV1322	FP1298	FN1358	APN1034	32889	TAT USA 34 CTB	TAT USA 34 PAD	TAT USA 34 PAD	TAT USA 34 CTB	LOCKWOOD USA 44-22TFH	3305307704	1	Open Loop	
TV1322	FP1298	FN1358	APN1034	32890	TAT USA 34 CTB	TAT USA 34 PAD	TAT USA 34 PAD	TAT USA 34 CTB	MURPHY USA 34-22TFH-2B	3305307705	1	Open Loop	
TV1322	FP1298	FN1358	APN1034	19144	TAT USA 34 CTB	TAT USA 34 PAD	TAT USA 34 PAD	TAT USA 34 CTB	TAT USA 34-22H	3305303182	1	Open Loop	
TV1326	FP1302	FN1362	APN1103	22489	THOMAS MILLER USA CTB	THOMAS MILLER USA PAD	THOMAS MILLER USA PAD	THOMAS MILLER USA CTB	THOMAS MILLER USA 11-28H	3305500162	3	Closed Loop	
TV1326	FP1302	FN1362	APN1103	22785	THOMAS MILLER USA CTB	THOMAS MILLER USA PAD	THOMAS MILLER USA PAD	THOMAS MILLER USA CTB	THOMAS MILLER USA 21-28H	3305500165	3	Closed Loop	
TV1333	FP1309	FN1373	APN1105	18362	URAN 31-2H	URAN PAD	URAN PAD	URAN 31-2H	URAN 31-2H	3306101135	2	Closed Loop	
TV1336	FP1312	FN1235	APN1035	33290	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	LENA USA 14-22H	LENA USA 14-22H	3305307922	1	Open Loop	
TV1336	FP1312	FN1376	APN1035	30131	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	VERONICA USA CTB	BLUE CREEK USA 24-22TFH-2B	3305306518	1	Open Loop	
TV1336	FP1312	FN1376	APN1035	30135	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	VERONICA USA CTB	DEANE USA 24-22H	3305306522	1	Open Loop	
TV1336	FP1312	FN1376	APN1035	30134	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	VERONICA USA CTB	ROUGH COULEE USA 24-22TFH	3305306521	1	Open Loop	
TV1336	FP1312	FN1376	APN1035	30488	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	VERONICA USA CTB	TAT USA 14-22H	3305306658	1	Open Loop	
TV1336	FP1312	FN1376	APN1035	30133	VERONICA USA CTB-LENA USA 14-22H	VERONICA USA PAD	VERONICA USA PAD	VERONICA USA CTB	VERONICA USA 14-22TFH	3305306520	1	Open Loop	
TV1340	FP1316	FN1380	APN1106	21286	VORWERK USA 14-34H	VORWERK USA PAD	VORWERK USA PAD	VORWERK USA 14-34H	VORWERK USA 14-34H	3305500156	3	Closed Loop	
TV1342	FP1318	FN1382	APN1071	18114	WADHOLM 41-30H	WADHOLM PAD	WADHOLM PAD	WADHOLM 41-30H	WADHOLM 41-30H	3306101032	2	Closed Loop	
TV1343	FP1319	FN1383	APN1107	18434	WAKELUM 21-3H	WAKELUM 21 PAD	WAKELUM 21 PAD	WAKELUM 21-3H	WAKELUM 21-3H	3306101163	2	Closed Loop	
TV1344	FP1320	FN1384	APN1108	21750	WAKELUM 41 CTB	WAKELUM 41 PAD	WAKELUM 41 PAD	WAKELUM 41 CTB	WAKELUM 31-3TFH	3306101905	2	Closed Loop	
TV1344	FP1320	FN1384	APN1108	21369	WAKELUM 41 CTB	WAKELUM 41 PAD	WAKELUM 41 PAD	WAKELUM 41 CTB	WAKELUM 41-3H	3306101852	2	Closed Loop	
TV1345	FP1321	FN1385	APN1109	20494	WALDOCK USA 21-16H	WALDOCK USA PAD	WALDOCK USA PAD	WALDOCK USA 21-16H	WALDOCK USA 21-16H	3305500149	3	Closed Loop	
TV1346	FP1322	FN1386	APN1072	18693	WALJEN USA CTB	JASPER L USA PAD	WALJEN USA PAD	WALJEN USA CTB	BETTY SHOBE USA 41-8H	3306101263	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	33947	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	PRIOR USA 42-8TFH-2B	3306104125	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	33946	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	RANUM USA 44-8TFH-2B	3306104124	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	37403	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	STANDFEST USA 42-8H	3306104685	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	33945	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	WALCEL USA 42-8H	3306104123	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	21631	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	WALJEN USA 43-8H	3306101902	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	37395	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	WALLENINSON USA 44-8H	3306104684	2	Closed Loop	
TV1346	FP1322	FN1386	APN1072	21630	WALJEN USA CTB	WALJEN USA PAD	WALJEN USA PAD	WALJEN USA CTB	WALTON USA 43-8TFH	3306101901	2	Closed Loop	
TV1350	FP1326	FN1391	APN1110	29029	WARD-ROEHR USA CTB	WARD USA PAD	WARD-ROEHR USA CTB PAD	WARD-ROEHR USA CTB	ANGELA WARD USA 24-7H	3302502629	3	Closed Loop	
TV1350	FP1326	FN1391	APN1110	29030	WARD-ROEHR USA CTB	WARD USA PAD	WARD-ROEHR USA CTB PAD	WARD-ROEHR USA CTB	DELLANA WARD USA 14-7H	3302502630	3	Closed Loop	
TV1350	FP1326	FN1391	APN1110	24798	WARD-ROEHR USA CTB	ROEHR USA PAD	WARD-ROEHR USA CTB PAD	WARD-ROEHR USA CTB	ROEHR USA 34-7H	3302502043	3	Closed Loop	
TV1350	FP1326	FN1391	APN1110	25094	WARD-ROEHR USA CTB	WARD USA PAD	WARD-ROEHR USA CTB PAD	WARD-ROEHR USA CTB	WARD USA 24-7TFH	3302502074	3	Closed Loop	
TV1356	FP1332	FN1399	APN1111	19839	WINDY BOY USA 12-35H	WINDY BOY USA PAD	WINDY BOY USA PAD	WINDY BOY USA 12-35H	WINDY BOY USA 12-35H	3305303331	3	Closed Loop	
TV1360	FP1335	FN1403	APN1112	18274	WOLDING 14-24H	WOLDING PAD	WOLDING PAD	WOLDING 14-24H	WOLDING 14-24H	3306101102	2	Closed Loop	
TV1361	FP1336	FN1388	APN1037	34260	YELLOW OTTER USA CTB-WALKING EAGLE USA 44-12TFH	YELLOW OTTER USA PAD	YELLOW OTTER USA PAD	WALKING EAGLE USA 44-12TFH	WALKING EAGLE USA 44-12TFH	3306104151	1	Open Loop	
TV1361	FP1336	FN1404	APN1037	34262	YELLOW OTTER USA CTB-WALKING EAGLE USA 44-12TFH	YELLOW OTTER USA PAD	YELLOW OTTER USA PAD	YELLOW OTTER USA CTB	YELLOW OTTER USA 14-7TFH	3306104153	1	Open Loop	
TV1361	FP1336	FN1404	APN1037	34261	YELLOW OTTER USA CTB-WALKING EAGLE USA 44-12TFH	YELLOW OTTER USA PAD	YELLOW OTTER USA PAD	YELLOW OTTER USA CTB	YOUNG WOMAN USA 44-12H	3306104152	1	Open Loop	
TV1362	FP1246	FN1405	APN1098	36394	YESENKO USA CTB	QUALE USA PAD	QUALE USA PAD	YESENKO USA CTB	YELLOW BULL USA 14-16H	3305309047	3	Closed Loop	
TV1362	FP1246	FN1405	APN1098	36393	YESENKO USA CTB	QUALE USA PAD	QUALE USA PAD	YESENKO USA CTB	YESENKO USA 11-21TFH	3305309046	3	Closed Loop	
TV1364	FP1012	FN1407	APN1001	33928	ZELDA USA CTB	ANNIE USA PAD	ANNIE USA PAD	ZELDA USA CTB	HONAKER USA 41-30TFH	3305308138	1	Open Loop	
TV1364	FP1012	FN1407	APN1001	33927	ZELDA USA CTB	ANNIE USA PAD	ANNIE USA PAD	ZELDA USA CTB	ZELDA USA 11-29H	3305308137	1	Open Loop	

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NON-FBIR													
TVC#	FP#	FN#	APN#	NDIC	TVC# Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design	
TV1017	FP1016	FN1018		33869	ARTHUR CTB	ARTHUR PAD	ARTHUR PAD	ARTHUR CTB	WICKETT 24-35TFH	3302503340	4	Open Loop	
TV1017	FP1016	FN1018		33870	ARTHUR CTB	ARTHUR PAD	ARTHUR PAD	ARTHUR CTB	ARTHUR 24-35H	3302503341	4	Open Loop	
TV1017	FP1016	FN1018		33871	ARTHUR CTB	ARTHUR PAD	ARTHUR PAD	ARTHUR CTB	RUMMEL 24-35TFH	3302503342	4	Open Loop	
TV1017	FP1016	FN1018		33872	ARTHUR CTB	ARTHUR PAD	ARTHUR PAD	ARTHUR CTB	LAWRENCE 34-35H	3302503343	4	Open Loop	
TV1026	FP1024	FN1027		30548	BECK CTB	BECK PAD	BECK PAD	BECK CTB	JULIET 14-8TFH	3302502830	4	Closed Loop	
TV1026	FP1024	FN1027		16677	BECK CTB	BECK PAD	BECK PAD	BECK CTB	BECK 24-8H	3302500636	4	Closed Loop	
TV1026	FP1024	FN1027		16735	BECK CTB	BECK PAD	BECK PAD	BECK CTB	BECK 14-8H	3302500649	4	Closed Loop	
TV1026	FP1024	FN1027		29633	BECK CTB	DELIA USA PAD	BECK PAD	BECK CTB	HAMMEL 44-8TFH	3302502690	4	Closed Loop	
TV1026	FP1024	FN1027		29634	BECK CTB	DELIA USA PAD	BECK PAD	BECK CTB	DOUBLE H 34-8TFH	3302502691	4	Closed Loop	
TV1026	FP1024	FN1027		30549	BECK CTB	BECK PAD	BECK PAD	BECK CTB	TORRISON 24-8TFH	3302502831	4	Closed Loop	
TV1026	FP1024	FN1027		30550	BECK CTB	BECK PAD	BECK PAD	BECK CTB	BRUSH 24-8H	3302502832	4	Closed Loop	
TV1027	FP1026	FN1028		20685	BEN RECKARD CTB	BEN RECKARD PAD	BEN RECKARD PAD	BEN RECKARD CTB	BEN RECKARD 41-27H	3302501353	4	Closed Loop	
TV1027	FP1026	FN1028		21823	BEN RECKARD CTB	BEN RECKARD PAD	BEN RECKARD PAD	BEN RECKARD CTB	BEN RECKARD 44-22H	3302501527	4	Closed Loop	
TV1031	FP1172	FN1033		33401	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	KENNETH 24-7TFH	3302503268	4	Open Loop	
TV1031	FP1172	FN1033		33402	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	BETHOL 34-7H	3302503269	4	Open Loop	
TV1031	FP1172	FN1033		33403	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	STROUP 34-7TFH	3302503270	4	Open Loop	
TV1031	FP1172	FN1033		38536	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	WOODROW 31-18H	3302504343	4	Open Loop	
TV1031	FP1172	FN1033		38537	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	PORTER 31-18TFH	3302504344	4	Open Loop	
TV1031	FP1172	FN1033		38538	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	ANNABELLE 21-18H	3302504345	4	Open Loop	
TV1031	FP1172	FN1033		38539	BETHOL CTB	KEVIN BUEHNER 31 PAD	KEVIN BUEHNER 31 PAD	BETHOL CTB	ELIZA 21-18TFH	3302504346	4	Open Loop	
TV1032	FP1031	FN1034		25274	BETTY FETTIG CTB	BETTY FETTIG PAD	BETTY FETTIG PAD	BETTY FETTIG CTB	CLEMENS FETTIG 21-27TFH	3302502096	4	Closed Loop	
TV1032	FP1031	FN1034		25275	BETTY FETTIG CTB	BETTY FETTIG PAD	BETTY FETTIG PAD	BETTY FETTIG CTB	BETTY FETTIG 21-27H	3302502097	4	Closed Loop	
TV1032	FP1031	FN1034		25348	BETTY FETTIG CTB	BETTY FETTIG PAD	BETTY FETTIG PAD	BETTY FETTIG CTB	HADDEN 31-27TFH	3302502116	4	Closed Loop	
TV1032	FP1031	FN1034		25349	BETTY FETTIG CTB	BETTY FETTIG PAD	BETTY FETTIG PAD	BETTY FETTIG CTB	KUTCHER 31-27H	3302502117	4	Closed Loop	
TV1036	FP1032	FN1039		16736	BLUEGRASS CTB	BILL CONNOLLY PAD	BILL CONNOLLY PAD	BLUEGRASS CTB	BILL CONNOLLY 21-25H	3302500650	4	Closed Loop	
TV1036	FP1032	FN1039		25481	BLUEGRASS CTB	BILL CONNOLLY PAD	BILL CONNOLLY PAD	BLUEGRASS CTB	HUBBEL 24-24H	3302502142	4	Closed Loop	
TV1036	FP1032	FN1039		25482	BLUEGRASS CTB	BILL CONNOLLY PAD	BILL CONNOLLY PAD	BLUEGRASS CTB	WEBBER 21-25H	3302502143	4	Closed Loop	
TV1036	FP1032	FN1039		25483	BLUEGRASS CTB	BILL CONNOLLY PAD	BILL CONNOLLY PAD	BLUEGRASS CTB	KRUGER 24-24TFH	3302502144	4	Closed Loop	
TV1036	FP1032	FN1039		25484	BLUEGRASS CTB	BILL CONNOLLY PAD	BILL CONNOLLY PAD	BLUEGRASS CTB	BLUEGRASS 21-25TFH	3302502145	4	Closed Loop	
TV1038	FP1035	FN1041		28356	BOLDT CTB	BOLDT PAD	BOLDT PAD	BOLDT CTB	BOLDT 14-22TFH	3302502536	4	Closed Loop	
TV1038	FP1035	FN1041		28357	BOLDT CTB	BOLDT PAD	BOLDT PAD	BOLDT CTB	DAVIS 24-22H	3302502537	4	Closed Loop	
TV1038	FP1035	FN1041		28359	BOLDT CTB	BOLDT PAD	BOLDT PAD	BOLDT CTB	FRANK 24-22TFH	3302502539	4	Closed Loop	
TV1038	FP1035	FN1041		28360	BOLDT CTB	BOLDT PAD	BOLDT PAD	BOLDT CTB	MAY 34-22TFH	3302502540	4	Closed Loop	
TV1044	FP1043	FN1048		16654	BUEHNER 34 CTB	BUEHNER 34 PAD	BUEHNER 34 PAD	BUEHNER 34 CTB	BUEHNER 34-12H	3302500633	4	Closed Loop	
TV1044	FP1043	FN1048		16993	BUEHNER 34 CTB	BUEHNER 44 PAD	BUEHNER 44 PAD	BUEHNER 34 CTB	BUEHNER 44-12H	3302500710	4	Closed Loop	
TV1044	FP1043	FN1048		36735	BUEHNER 34 CTB	BUEHNER 34 PAD	BUEHNER 34 PAD	BUEHNER 34 CTB	BITTER 34-12TFH	3302503871	4	Closed Loop	
TV1044	FP1043	FN1048		36736	BUEHNER 34 CTB	BUEHNER 34 PAD	BUEHNER 34 PAD	BUEHNER 34 CTB	EMIL 24-12TFH	3302503872	4	Closed Loop	
TV1044	FP1043	FN1048		36737	BUEHNER 34 CTB	BUEHNER 34 PAD	BUEHNER 34 PAD	BUEHNER 34 CTB	BUEHNER 34-12H	3302503873	4	Closed Loop	
TV1053	FP1049	FN1057		33324	CHAPMAN CTB	CHAPMAN PAD	CHAPMAN PAD	CHAPMAN CTB	FRENCH 31-15TFH	3302503262	4	Open Loop	
TV1053	FP1049	FN1057		33325	CHAPMAN CTB	CHAPMAN PAD	CHAPMAN PAD	CHAPMAN CTB	CHAPMAN 31-15H	3302503263	4	Open Loop	
TV1053	FP1049	FN1057		33326	CHAPMAN CTB	CHAPMAN PAD	CHAPMAN PAD	CHAPMAN CTB	SPRING 21-15TFH	3302503264	4	Open Loop	
TV1076	FP1073	FN1081		36265	DASHA USA CTB	DASHA USA PAD	DASHA USA PAD	DASHA USA CTB	DOROTHY 14-12TFH	3302503754	4	Open Loop	
TV1076	FP1073	FN1081		36266	DASHA USA CTB	DASHA USA PAD	DASHA USA PAD	DASHA USA CTB	DASHA USA 44-11H	3302503755	4	Open Loop	
TV1080	FP1076	FN1085		17454	DEBB STROH CTB	DEBB STROH PAD	DEBB STROH PAD	DEBB STROH CTB	STROH 14-11H	3302500799	4	Open Loop	
TV1080	FP1076	FN1085		17556	DEBB STROH CTB	DEBB STROH PAD	DEBB STROH PAD	DEBB STROH CTB	DEBB STROH 44-11H	3302500816	4	Open Loop	
TV1080	FP1076	FN1085		27739	DEBB STROH CTB	DEBB STROH PAD	DEBB STROH PAD	DEBB STROH CTB	DAVE STROH 34-11TFH	3302502469	4	Open Loop	
TV1084	FP1080	FN1089		29630	DELIA USA CTB	DELIA USA PAD	DELIA USA PAD	DELIA USA CTB	CLARICE USA 14-9H	3302502687	4	Open Loop	
TV1084	FP1080	FN1089		29631	DELIA USA CTB	DELIA USA PAD	DELIA USA PAD	DELIA USA CTB	DELIA USA 14-9TFH	3302502688	4	Open Loop	
TV1095	FP1090	FN1102		26726	EDWARDS CTB	EDWARDS PAD	EDWARDS PAD	EDWARDS CTB	EDWARDS 44-34TFH	3302502319	4	Closed Loop	
TV1095	FP1090	FN1102		26727	EDWARDS CTB	EDWARDS PAD	EDWARDS PAD	EDWARDS CTB	HERB 14-35H	3302502320	4	Closed Loop	
TV1095	FP1090	FN1102		26728	EDWARDS CTB	EDWARDS PAD	EDWARDS PAD	EDWARDS CTB	WALTER 11-2TFH	3302502321	4	Closed Loop	
TV1095	FP1090	FN1102		26729	EDWARDS CTB	EDWARDS PAD	EDWARDS PAD	EDWARDS CTB	JAKOB 14-35TFH	3302502322	4	Closed Loop	
TV1104	FP1071	FN1112		16704	EVELYN CTB	DARCY PAD	DARCY PAD	EVELYN CTB	DARCY 34-32H	3302500642	4	Closed Loop	
TV1104	FP1071	FN1112		25114	EVELYN CTB	DARCY PAD	DARCY PAD	EVELYN CTB	PATRICK 34-32H	3302502082	4	Closed Loop	
TV1104	FP1071	FN1112		25115	EVELYN CTB	DARCY PAD	DARCY PAD	EVELYN CTB	EVELYN 34-32TFH	3302502083	4	Closed Loop	
TV1106	FP1099	FN1114		15854	FEDORA 34-22H	FEDORA 34 PAD	FEDORA 34 PAD	FEDORA 34-22H	FEDORA 34-22H	3302500568	4	Closed Loop	
TV1383	FP1350	FN1426		40065	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	COOMBS 11-2H	3302504729	1	LEAF	
TV1383	FP1350	FN1426		40066	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	TAYLOR 21-2H	3302504730	1	LEAF	
TV1383	FP1350	FN1426		40067	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	MALLOY 41-2H	3302504731	1	LEAF	
TV1383	FP1350	FN1426		40068	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	FRYE 41-2TFH	330240732	1	LEAF	
TV1383	FP1350	FN1426		40069	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	GRAVES 11-1H	3302504733	1	LEAF	
TV1383	FP1350	FN1426		40070	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	SIMPSON 11-1TFH	3302504734	1	LEAF	
TV1383	FP1350	FN1426		40071	FRYE CTB	FRYE PAD	FRYE PAD	FRYE CTB	ROSCOE 21-1H	3302504735	1	LEAF	
TV1390	FP1355	FN1432		40537	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	CHANDLER 31-15H	3302504845	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40534	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	DECORAH 44-10TFH	3302504842	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40533	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	DURKEE 44-10H	3302504841	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40538	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	ELLESTAD 41-15H	3302504846	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40462	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	FINHOLT 34-10TFH	3302504817	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40539	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	FRANSTAD 41-15TFH	3302504847	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40536	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	FRANKLIN 14-11TFH	3302504844	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40535	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	PRINCE 44-11H	3302504843	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40540	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	REX11-14H	3302504848	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40532	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	STELLA 44-10H	3302504840	CD, I.V.A.7.c.(1)	LEAF	
TV1390	FP1355	FN1432		40461	GAUGLER CTB	GAUGLER PAD	GAUGLER PAD	GAUGLER CTB	SWENSON 24-10H	3302504816	CD, I.V.A.7.c.(1)	LEAF	
TV1122	FP1113	FN1130		19375	GERTRUDE TUHY CTB	GERTRUDE TUHY PAD	GERTRUDE TUHY PAD	GERTRUDE TUHY CTB	GERTRUDE TUHY 34-24H	3302501147	4	Open Loop	
TV1122	FP1113	FN1130		27558	GERTRUDE TUHY CTB	GERTRUDE TUHY PAD	GERTRUDE TUHY PAD	GERTRUDE TUHY CTB	SAMANN 34-24H	3302502452	4	Open Loop	
TV1122	FP1113	FN1130		27559	GERTRUDE TUHY CTB	GERTRUDE TUHY PAD	GERTRUDE TUHY PAD	GERTRUDE TUHY CTB	HARRY 34-24TFH	3302502453	4	Open Loop	
TV1122	FP1113	FN1130		27560	GERTRUDE TUHY CTB	GERTRUDE TUHY PAD	GERTRUDE TUHY PAD	GERTRUDE TUHY CTB	FRIEDERICH 34-24H	3302502454	4	Open Loop	
TV1122	FP1113	FN1130		28005	GERTRUDE TUHY CTB	GERTRUDE TUHY PAD	GERTRUDE TUHY PAD	GERTRUDE TUHY CTB	MEEBIL 44-24TFH	3302502502	4	Open Loop	
TV1381	FP1116	FN1425		34669	GLORIA 2 CTB	GLORIA PAD	GLORIA PAD	GLORIA 2 CTB	FRANKLIN 44-16H	3302503455	1	LEAF	
TV1381	FP1116	FN1425		34892	GLORIA 2 CTB	GLORIA PAD	GLORIA PAD	GLORIA 2 CTB	GLORIA 24-16H	3302503500	1	LEAF	
TV1381	FP1116	FN1425		34666	GLORIA 2 CTB	GLORIA PAD	GLORIA PAD	GLORIA 2 CTB	NORTHROP 34-16H	3302503453	1	LEAF	
TV1381	FP1116	FN1425		34667	GLORIA 2 CTB	GLORIA PAD	GLORIA PAD	GLORIA 2 CTB	VEDDY 44-16H	3302503454	1	LEAF	
TV1381	FP1116	FN1425		17999	GLORIA 2 CTB	JACQUELINE OLSON PAD	JACQUELINE OLSON PAD	GLORIA 2 CTB	JACQUELINE OLSON 14-16H	3302500906	1	LEAF	
TV1381	FP1116	FN1425		39987	GLORIA 2 CTB	JACQUELINE OLSON PAD	GLORIA PAD	GLORIA 2 CTB	BASHAM 31-21H	3302504719	1	LEAF	
TV1381	FP1116	FN1425		39984	GLORIA 2 CTB	JACQUELINE OLSON PAD	GLORIA PAD	GLORIA 2 CTB	CALVIN 11-21H	3302504716	1	LEAF	
TV1381	FP1116	FN1425		39988	GLORIA 2 CTB	JACQUELINE OLSON PAD	GLORIA PAD	GLORIA 2 CTB	COAN 41-21H	3302504720	1	LEAF	
TV1381	FP1116	FN1425		39983	GLORIA 2 CTB	JACQUELINE OLSON PAD	GLORIA PAD	GLORIA 2 CTB	RUTLEDGE 41-20H	3302504715	1	LEAF	
TV1381	FP1116	FN14											

## Appendix A: Well Pads Subject to Consent Decree

NON-FBIR													
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design	
TV1381	FP1116	FN1425		39985	GLORIA 2 CTB	JACQUELINE OLSON PAD	GLORIA PAD	GLORIA 2 CTB	WESTRUM 14-16H	3302504717	1	LEAF	
TV1381	FP1116	FN1425		39917	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	ANSETH 31-22H	3302504704	1	LEAF	
TV1381	FP1116	FN1425		39916	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	ARNEW 41-22H	3302504703	1	LEAF	
TV1381	FP1116	FN1425		39918	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	BERGELIE 21-22H	3302504705	1	LEAF	
TV1381	FP1116	FN1425		40126	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	ERBE 41-22H	3302504753	1	LEAF	
TV1381	FP1116	FN1425		39919	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	QUAM 11-22H	3302504706	1	LEAF	
TV1381	FP1116	FN1425		39989	GLORIA 2 CTB	ANSETH PAD	GLORIA PAD	GLORIA 2 CTB	MCBRIDE 11-22H	3302504721	1	LEAF	
TV1130	FP1075	FN1140		27581	GOREY-VIANI USA CTB	DAWN KUPPER PAD	DAWN KUPPER PAD	GOREY-VIANI USA CTB	VIANI USA 44-10H	3302502457	4	Open Loop	
TV1130	FP1075	FN1140		27582	GOREY-VIANI USA CTB	DAWN KUPPER PAD	DAWN KUPPER PAD	GOREY-VIANI USA CTB	GOREY 44-10TFH	3302502458	4	Open Loop	
TV1135	FP1124	FN1145		33580	GRAVEL COULEE CTB	GRAVEL COULEE PAD	GRAVEL COULEE PAD	GRAVEL COULEE CTB	MCFADDEN 14-11H	3302503304	4	Closed Loop	
TV1135	FP1124	FN1145		33581	GRAVEL COULEE CTB	GRAVEL COULEE PAD	GRAVEL COULEE PAD	GRAVEL COULEE CTB	OLEA 24-11TFH	3302503305	4	Closed Loop	
TV1135	FP1124	FN1145		33582	GRAVEL COULEE CTB	GRAVEL COULEE PAD	GRAVEL COULEE PAD	GRAVEL COULEE CTB	MORRISON 24-11H	3302503306	4	Closed Loop	
TV1135	FP1124	FN1145		33583	GRAVEL COULEE CTB	GRAVEL COULEE PAD	GRAVEL COULEE PAD	GRAVEL COULEE CTB	SUNDBY 24-11TFH	3302503307	4	Closed Loop	
TV1135	FP1124	FN1145		33589	GRAVEL COULEE CTB	GRAVEL COULEE PAD	GRAVEL COULEE PAD	GRAVEL COULEE CTB	GRAVEL COULEE 14-11TFH	3302503311	4	Closed Loop	
TV1376	FP1345	FN1419		39354	GUY CARLSON CTB	GUY CARLSON PAD	GUY CARLSON PAD	GUY CARLSON CTB	GUY CARLSON 24-31H	3302504575	1	LEAF	
TV1376	FP1345	FN1419		16759	GUY CARLSON CTB	GRANT CARLSON 24 PAD	GUY CARLSON PAD	GUY CARLSON CTB	GRANT CARLSON 24-31H	3302500658	1	LEAF	
TV1376	FP1345	FN1419		39355	GUY CARLSON CTB	GUY CARLSON PAD	GUY CARLSON PAD	GUY CARLSON CTB	HADLEY 34-31TFH	3302545760	1	LEAF	
TV1376	FP1345	FN1419		39353	GUY CARLSON CTB	GUY CARLSON PAD	GUY CARLSON PAD	GUY CARLSON CTB	KNOX 24-31TFH	3302504574	1	LEAF	
TV1376	FP1345	FN1419		39356	GUY CARLSON CTB	GUY CARLSON PAD	GUY CARLSON PAD	GUY CARLSON CTB	KYE 44-31H	3302504577	1	LEAF	
TV1376	FP1345	FN1419		40242	GUY CARLSON CTB	GRANT CARLSON 24 PAD	GUY CARLSON PAD	GUY CARLSON CTB	LENY JO 21-6H	3302504781	1	LEAF	
TV1376	FP1345	FN1419		40201	GUY CARLSON CTB	GRANT CARLSON 24 PAD	GUY CARLSON PAD	GUY CARLSON CTB	NICOLE 31-6H	3302504788	1	LEAF	
TV1376	FP1345	FN1419		40243	GUY CARLSON CTB	GRANT CARLSON 24 PAD	GUY CARLSON PAD	GUY CARLSON CTB	KGC 31-6H	3302504782	1	LEAF	
TV1139	FP1128	FN1152		17333	HAROLD BENZ CTB	HAROLD BENZ PAD	HAROLD BENZ PAD	HAROLD BENZ CTB	HAROLD BENZ 24-24H	3302500776	4	Closed Loop	
TV1139	FP1128	FN1152		27074	HAROLD BENZ CTB	HAROLD BENZ PAD	HAROLD BENZ PAD	HAROLD BENZ CTB	ADAMSON 14-24TFH	3302502363	4	Closed Loop	
TV1139	FP1128	FN1152		27077	HAROLD BENZ CTB	HAROLD BENZ PAD	HAROLD BENZ PAD	HAROLD BENZ CTB	VOLLMER 24-24TFH	3302502364	4	Closed Loop	
TV1146	FP1135	FN1159		16909	HERBERT CTB	HERBERT PAD	HERBERT PAD	HERBERT CTB	LILY REISS 41-14H	3302500688	4	Open Loop	
TV1146	FP1135	FN1159		35820	HERBERT CTB	HERBERT PAD	HERBERT PAD	HERBERT CTB	MAHER 41-14TFH	3302503634	4	Open Loop	
TV1146	FP1135	FN1159		35821	HERBERT CTB	HERBERT PAD	HERBERT PAD	HERBERT CTB	BRYDEN 11-13H	3302503635	4	Open Loop	
TV1146	FP1135	FN1159		36026	HERBERT CTB	HERBERT PAD	HERBERT PAD	HERBERT CTB	HERBERT 41-14H	3302503667	4	Open Loop	
TV1146	FP1135	FN1159		36027	HERBERT CTB	HERBERT PAD	HERBERT PAD	HERBERT CTB	PLETAN 11-13TFH	3302503668	4	Open Loop	
TV1150	FP1059	FN1165		33435	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	HUGO 34-11H	3302503279	4	Open Loop	
TV1150	FP1059	FN1165		33436	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	GIFFORD 34-11TFH	3302503280	4	Open Loop	
TV1150	FP1059	FN1165		33437	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	TIPTON 34-11H	3302503281	4	Open Loop	
TV1150	FP1059	FN1165		33443	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	MARLENE 34-11TFH	3302503282	4	Open Loop	
TV1150	FP1059	FN1165		38231	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	WR CONNOLLY 31-14H	3302504206	4	Open Loop	
TV1150	FP1059	FN1165		38232	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	FRIEDA 31-14TFH	3302504207	4	Open Loop	
TV1150	FP1059	FN1165		38233	HUGO CTB	CONNOLLY 31 PAD	CONNOLLY 31 PAD	HUGO CTB	SEBASTIAN 21-14TFH	3302504208	4	Open Loop	
TV1153	FP1141	FN1168		22786	IRENE KOVALOFF 11-18H-IRENE KOVALOFF 14-7H	IRENE KOVALOFF 11 PAD	IRENE KOVALOFF 11 PAD	IRENE KOVALOFF 11-18H	IRENE KOVALOFF 11-18H	3302501681	4	Open Loop	
TV1153	FP1141	FN1168		22787	IRENE KOVALOFF 11-18H-IRENE KOVALOFF 14-7H	IRENE KOVALOFF 11 PAD	IRENE KOVALOFF 11 PAD	IRENE KOVALOFF 14-7H	IRENE KOVALOFF 14-7H	3302501682	4	Open Loop	
TV1176	FP1163	FN1195		28683	KARY CTB-KERKHOFF 14-8H	KARY PAD	KARY PAD	KARY CTB	KARY 11-17H	3302502586	4	Open Loop	
TV1176	FP1163	FN1195		28684	KARY CTB-KERKHOFF 14-8H	KARY PAD	KARY PAD	KARY CTB	KERKHOFF 14-8H	3302502588	4	Open Loop	
TV1176	FP1163	FN1195		28694	KARY CTB-KERKHOFF 14-8H	KARY PAD	KARY PAD	KARY CTB	KNOPIK 24-8H	3302502590	4	Open Loop	
TV1176	FP1163	FN1195		28695	KARY CTB-KERKHOFF 14-8H	KARY PAD	KARY PAD	KARY CTB	HAZEL 14-8H	3302502591	4	Open Loop	
TV1176	FP1163	FN1195		29246	KARY CTB-KERKHOFF 14-8H	KARY PAD	KARY PAD	KARY CTB	PIATT 11-17H	3302502656	4	Open Loop	
TV1181	FP1166	FN1200		17375	KENT CARLSON 14 CTB	KENT CARLSON 14 PAD	KENT CARLSON 14 PAD	KENT CARLSON 14 CTB	KENT CARLSON 14-36H	3302500782	4	Open Loop	
TV1181	FP1166	FN1200		34764	KENT CARLSON 14 CTB	KENT CARLSON 14 PAD	KENT CARLSON 14 PAD	KENT CARLSON 14 CTB	JOCELYN 14-36TFH	3302503468	4	Open Loop	
TV1181	FP1166	FN1200		34765	KENT CARLSON 14 CTB	KENT CARLSON 14 PAD	KENT CARLSON 14 PAD	KENT CARLSON 14 CTB	KINNEY 24-36TFH	3302503469	4	Open Loop	
TV1181	FP1166	FN1200		36267	KENT CARLSON 14 CTB	KENT CARLSON 14 PAD	KENT CARLSON 14 PAD	KENT CARLSON 14 CTB	BLANCHE 14-36H	3302503756	4	Open Loop	
TV1182	FP1167	FN1201		16761	KENT CARLSON 24-36H	KENT CARLSON 24 PAD	KENT CARLSON 24 PAD	KENT CARLSON 24-36H	KENT CARLSON 24-36H	3302500660	4	Closed Loop	
TV1196	FP1181	FN1216		19553	KREBS CTB	LUCY FLECKENSTEIN PAD	KREBS PAD	KREBS CTB	LUCY FLECKENSTEIN 34-20H	3302501165	4	Closed Loop	
TV1196	FP1181	FN1216		28702	KREBS CTB	KREBS PAD	KREBS PAD	KREBS CTB	KREBS 34-20TFH	3302502592	4	Closed Loop	
TV1196	FP1181	FN1216		28703	KREBS CTB	KREBS PAD	KREBS PAD	KREBS CTB	HAMILTON 34-20H	3302502593	4	Closed Loop	
TV1196	FP1181	FN1216		28704	KREBS CTB	KREBS PAD	KREBS PAD	KREBS CTB	GREIDER 34-20TFH	3302502594	4	Closed Loop	
TV1196	FP1181	FN1216		28705	KREBS CTB	KREBS PAD	KREBS PAD	KREBS CTB	CASTNER 34-20H	3302502595	4	Closed Loop	
TV1196	FP1181	FN1216		28708	KREBS CTB	KREBS PAD	KREBS PAD	KREBS CTB	BRINK 24-20TFH	3302502596	4	Closed Loop	
TV1196	FP1181	FN1216		29442	KREBS CTB	LUCY FLECKENSTEIN PAD	KREBS PAD	KREBS CTB	FORCE 44-20TFH	3302502664	4	Closed Loop	
TV1200	FP1185	FN1220		16626	KUPPER CTB	KUPPER 34 PAD	KUPPER 34 PAD	KUPPER CTB	KUPPER 34-10H	3302500629	4	Closed Loop	
TV1200	FP1185	FN1220		16940	KUPPER CTB	KUPPER 43 PAD	KUPPER 43 PAD	KUPPER CTB	KUPPER 43-10H	3302500695	4	Closed Loop	
TV1203	FP1186	FN1223		17097	LADONNA KLATT CTB	LADONNA KLATT PAD	LADONNA KLATT PAD	LADONNA KLATT CTB	LADONNA KLATT 24-22H	3302500733	4	Closed Loop	
TV1203	FP1186	FN1223		18060	LADONNA KLATT CTB	DARVEY KLATT PAD	LADONNA KLATT PAD	LADONNA KLATT CTB	DARVEY KLATT 44-22H	3302500921	4	Closed Loop	
TV1203	FP1186	FN1223		28238	LADONNA KLATT CTB	FETTIG 11 PAD	LADONNA KLATT PAD	LADONNA KLATT CTB	HOLLINGSWORTH 24-22TFH	3302502516	4	Closed Loop	
TV1212	FP1195	FN1232		18141	LAZY HE 21-17H	LAZY HE 21 PAD	LAZY HE 21 PAD	LAZY HE 21-17H	LAZY HE 21-17H	3302500940	4	Closed Loop	
TV1216	FP1197	FN1236		27567	LEWIS CTB	LEWIS PAD	LEWIS PAD	LEWIS CTB	HELLERUD 14-23TFH	3302502455	4	Closed Loop	
TV1216	FP1197	FN1236		27568	LEWIS CTB	LEWIS PAD	LEWIS PAD	LEWIS CTB	LEWIS 44-22H	3302502456	4	Closed Loop	
TV1227	FP1209	FN1250		16180	MARLIN 14 CTB	MARLIN 24 PAD	MARLIN 14 PAD	MARLIN 14 CTB	MARLIN 24-12H	3302500579	4	Closed Loop	
TV1227	FP1209	FN1250		33247	MARLIN 14 CTB	HONDO PAD	MARLIN 14 PAD	MARLIN 14 CTB	MITTELSTADT 34-12H	3302503256	4	Closed Loop	
TV1227	FP1209	FN1250		33248	MARLIN 14 CTB	HONDO PAD	MARLIN 14 PAD	MARLIN 14 CTB	HONDO 34-12TFH	3302503257	4	Closed Loop	
TV1227	FP1209	FN1250		36108	MARLIN 14 CTB	DASHA USA PAD	MARLIN 14 PAD	MARLIN 14 CTB	SARAH 24-12TFH	3302503715	4	Closed Loop	
TV1231	FP1213	FN1255		35524	MASON CTB	MASON PAD	MASON PAD	MASON CTB	MASON 14-31TFH	3302503582	4	Open Loop	
TV1231	FP1213	FN1255		35525	MASON CTB	MASON PAD	MASON PAD	MASON CTB	HAYES 14-31H	3302503583	4	Open Loop	
TV1231	FP1213	FN1255		35526	MASON CTB	MASON PAD	MASON PAD	MASON CTB	GWEN 44-38TFH	3302503584	4	Open Loop	
TV1237	FP1218	FN1263		21993	MILTON GUENTHER 14 CTB	MILTON GUENTHER PAD	MILTON GUENTHER PAD	MILTON GUENTHER 14 CTB	MILTON GUENTHER 14-9H	3302501561	4	Open Loop	
TV1237	FP1218	FN1263		24091	MILTON GUENTHER 14 CTB	MILTON GUENTHER PAD	MILTON GUENTHER PAD	MILTON GUENTHER 14 CTB	VMR TRUST 11-16TFH	3302501920	4	Open Loop	
TV1237	FP1218	FN1263		28848	MILTON GUENTHER 14 CTB	MILTON GUENTHER PAD	MILTON GUENTHER PAD	MILTON GUENTHER 14 CTB	SYDNEY 14-9TFH	3302502604	4	Open Loop	
TV1237	FP1218	FN1263		28849	MILTON GUENTHER 14 CTB	MILTON GUENTHER PAD	MILTON GUENTHER PAD	MILTON GUENTHER 14 CTB	DONALLY 11-16H	3302502605	4	Open Loop	
TV1256	FP1233	FN1284		28110	OTTO CTB	OTTO PAD	OTTO PAD	OTTO CTB	GOTTLIEB 11-26TFH	3302502509	4	Closed Loop	
TV1256	FP1233	FN1284		28111	OTTO CTB	OTTO PAD	OTTO PAD	OTTO CTB	SUSANA 14-23TFH	3302502510	4	Closed Loop	
TV1256	FP1233	FN1284		28458	OTTO CTB	OTTO PAD	OTTO PAD	OTTO CTB	SOMMER 11-26H	3302502556	4	Closed Loop	
TV1256	FP1233	FN1284		28459	OTTO CTB	OTTO PAD	OTTO PAD	OTTO CTB	OTTO 14-23H	3302502557	4	Closed Loop	
TV1259	FP1236	FN1287		16982	PAULSON 14 CTB	PAULSON 14 PAD	PAULSON 14 PAD	PAULSON 14 CTB	PAULSON 14-9H	3302500705	4	Open Loop	
TV1259	FP1236	FN1287		25587	PAULSON 14 CTB	PAULSON 14 PAD	PAULSON 14 PAD	PAULSON 14 CTB	FAIMAN 24-9TFH	3302502684	4	Open Loop	
TV1372	FP1342	FN1415		38794	RAVN CTB	RAVN PAD	RAVN PAD	RAVN CTB	ERLING 24-21TFH	3302504427	CD, IV A.7.c.1)	LEAF	
TV1373	FP1342	FN1415		38795	RAVN CTB	RAVN PAD	RAVN PAD	RAVN CTB	RAVN 24-21H	3302504428	CD, IV A.7.c.1)	LEAF	
TV1374	FP1342	FN1415		38793	RAVN CTB	RAVN PAD	RAVN PAD	RAVN CTB	ROWE 14-21H	3302504426	CD, IV A.7.c.1)	LEAF	
TV1375	FP1342	FN1415		38797	RAVN CTB	RAVN PAD	RAVN PAD	RAVN CTB	SKINNER 21-28TFH	3302504430	CD, IV A.7.c.1)	LEAF	
TV1376	FP1342	FN1415		38796	RAVN CTB	RAVN PAD	RAVN PAD	RAVN CTB	VALBORG 34-21TFH	3302504429	CD, IV A.7.c.1)	LEAF	
TV1377	FP1342	FN1415		40824	RAVN CTB	AKERS PAD	RAVN PAD	RAVN CTB	AKERS 41-28H	3302504909	CD, IV A.7.c.1)	LEAF	
TV1378	FP1342	FN1415		40828	RAVN CTB	AKERS PAD	RAVN PAD	RAVN CTB	KLEVEN 31-28H	3302504910	CD, IV A.7.c.1)	LEAF	
TV1379	FP1342	FN1415		40829	RAVN CTB	AKERS PAD	RAVN PAD	RAVN CTB	MARGARET 41-28H	3302504911	CD, IV A.7.c.1)	LEAF	

## Appendix A: Well Pads Subject to Consent Decree

NON-FBIR													
TVCS#	FP#	FN#	APN#	NDIC	TVCS Name	Well Head Pad	Well Pad (i.e., Facility Pad)	Facility Name	Well Name	API Well Number	Group	Intended Design	
TV1380	FP1342	FN1415		40838	RAVN CTB	AKERS PAD	RAVN PAD	RAVN CTB	SHEEHAN 21-27H	3302504912	CD, I.V.A.7.c.(1)	LEAF	
TV1381	FP1342	FN1415		40708	RAVN CTB	AKERS PAD	RAVN PAD	RAVN CTB	SIMMONS 31-27H	3302504880	CD, I.V.A.7.c.(1)	LEAF	
TV1274	FP1251	FN1302		17449	REAGAN CTB	CHARCHENKO 14 PAD	REAGAN PAD	REAGAN CTB	CHARCHENKO 14-21H	3302500797	4	Closed Loop	
TV1274	FP1251	FN1302		36197	REAGAN CTB	REAGAN PAD	REAGAN PAD	REAGAN CTB	REAGAN 14-21H	3302503737	4	Closed Loop	
TV1274	FP1251	FN1302		36198	REAGAN CTB	REAGAN PAD	REAGAN PAD	REAGAN CTB	PARMETER 14-21H	3302503738	4	Closed Loop	
TV1274	FP1251	FN1302		36617	REAGAN CTB	REAGAN PAD	REAGAN PAD	REAGAN CTB	EASTON 44-20H	3302503849	4	Closed Loop	
TV1275	FP1252	FN1303		16365	RECKARD CTB	RECKARD PAD	RECKARD PAD	RECKARD CTB	RECKARD 31-27H	3302500598	4	Closed Loop	
TV1275	FP1252	FN1303		17107	RECKARD CTB	PAM RECKARD PAD	RECKARD PAD	RECKARD CTB	PAM RECKARD 11-27H	3302500737	4	Closed Loop	
TV1275	FP1252	FN1303		28358	RECKARD CTB	BOLDT PAD	RECKARD PAD	RECKARD CTB	REDJUN 21-27TFH	3302502538	4	Closed Loop	
TV1287	FP1263	FN1315		29381	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	TRINITY 14-21H	3302502658	4	Open Loop	
TV1287	FP1263	FN1315		29382	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	RINGER 14-21TFH	3302502659	4	Open Loop	
TV1287	FP1263	FN1315		29383	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	WILHELM 24-21TFH	3302502660	4	Open Loop	
TV1287	FP1263	FN1315		29384	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	ULMER 24-21H	3302502661	4	Open Loop	
TV1287	FP1263	FN1315		34428	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	KLAUS 11-28H	3302503422	4	Open Loop	
TV1287	FP1263	FN1315		34429	RINGER CTB	RINGER PAD	RINGER PAD	RINGER CTB	OTIS 11-28TFH	3302503423	4	Open Loop	
TV1290	FP1266	FN1318		18993	ROSA BENZ CTB	ROSA BENZ PAD	ROSA BENZ PAD	ROSA BENZ CTB	ROSA BENZ 44-23H	3302501095	4	Open Loop	
TV1290	FP1266	FN1318		34755	ROSA BENZ CTB	ROSA BENZ PAD	ROSA BENZ PAD	ROSA BENZ CTB	HIGGINS 31-26TFH	3302503463	4	Open Loop	
TV1290	FP1266	FN1318		34756	ROSA BENZ CTB	ROSA BENZ PAD	ROSA BENZ PAD	ROSA BENZ CTB	SMIDER 41-26TFH	3302503464	4	Open Loop	
TV1290	FP1266	FN1318		34757	ROSA BENZ CTB	ROSA BENZ PAD	ROSA BENZ PAD	ROSA BENZ CTB	RUTH 44-23TFH	3302503465	4	Open Loop	
TV1290	FP1266	FN1318		36167	ROSA BENZ CTB	ROSA BENZ PAD	ROSA BENZ PAD	ROSA BENZ CTB	MEREDITH 14-24H	3302503727	4	Open Loop	
TV1296	FP1272	FN1326		23106	SCHMALZ 34 CTB-T D STEFFAN 21-27H	SCHMALZ PAD	SCHMALZ PAD	SCHMALZ 34 CTB	SCHMALZ 34-22H	3302501760	4	Closed Loop	
TV1296	FP1272	FN1326		23107	SCHMALZ 34 CTB-T D STEFFAN 21-27H	SCHMALZ PAD	SCHMALZ PAD	SCHMALZ 34 CTB	T D STEFFAN 21-27H	3302501761	4	Closed Loop	
TV1296	FP1272	FN1326		23391	SCHMALZ 34 CTB-T D STEFFAN 21-27H	DEANNA STEFFAN PAD	SCHMALZ PAD	SCHMALZ 34 CTB	DEANNA STEFFAN 44-22H	3302501819	4	Closed Loop	
TV1308	FP1285	FN1341		35175	STATE EGGERT CTB	STATE EGGERT CTB	STATE EGGERT PAD	STATE EGGERT CTB	STATE EGGERT 24-36H	3302503537	4	Open Loop	
TV1308	FP1285	FN1341		35176	STATE EGGERT CTB	STATE EGGERT CTB	STATE EGGERT PAD	STATE EGGERT CTB	STATE EILEEN 34-36TFH	3302503538	4	Open Loop	
TV1308	FP1285	FN1341		35177	STATE EGGERT CTB	STATE EGGERT CTB	STATE EGGERT PAD	STATE EGGERT CTB	STATE ELIAS 34-36TFH	3302503539	4	Open Loop	
TV1308	FP1285	FN1341		35178	STATE EGGERT CTB	STATE EGGERT CTB	STATE EGGERT PAD	STATE EGGERT CTB	STATE ETTA 44-36H	3302503540	4	Open Loop	
TV1310	FP1288	FN1343		34048	STATE KREIGER CTB	STATE KREIGER CTB	STATE KREIGER PAD	STATE KREIGER CTB	STATE KELLING 14-36TFH	3302503360	4	Open Loop	
TV1310	FP1288	FN1343		34049	STATE KREIGER CTB	STATE KREIGER CTB	STATE KREIGER PAD	STATE KREIGER CTB	STATE KREIGER 14-36H	3302503361	4	Open Loop	
TV1310	FP1288	FN1343		34050	STATE KREIGER CTB	STATE KREIGER CTB	STATE KREIGER PAD	STATE KREIGER CTB	STATE OSTER 14-36TFH	3302503362	4	Open Loop	
TV1316	FP1293	FN1349		16333	STOHLER 41 CTB	STOHLER 21 PAD	STOHLER 41 PAD	STOHLER 41 CTB	STOHLER 21-30H	3302500597	4	Closed Loop	
TV1316	FP1293	FN1349		16860	STOHLER 41 CTB	STOHLER 41 PAD	STOHLER 41 PAD	STOHLER 41 CTB	STOHLER 41-30H	3302500681	4	Closed Loop	
TV1316	FP1293	FN1349		30266	STOHLER 41 CTB	STOHLER 41 PAD	STOHLER 41 PAD	STOHLER 41 CTB	HILLESLAND 31-3TFH	3302502792	4	Closed Loop	
TV1316	FP1293	FN1349		33597	STOHLER 41 CTB	STOHLER 41 PAD	STOHLER 41 PAD	STOHLER 41 CTB	STANTON 41-30H	3302503309	4	Closed Loop	
TV1316	FP1293	FN1349		33598	STOHLER 41 CTB	STOHLER 41 PAD	STOHLER 41 PAD	STOHLER 41 CTB	RITA 41-3TFH	3302503310	4	Closed Loop	
TV1319	FP1295	FN1354		16811	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	T KUPPER USA 34-11H	3302500672	4	Open Loop	
TV1319	FP1295	FN1354		17311	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	T. KUPPER 14-11H	3302500767	4	Open Loop	
TV1319	FP1295	FN1354		28231	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	ELMER USA 14-11TFH	3302502514	4	Open Loop	
TV1319	FP1295	FN1354		28415	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	KARMEN USA 44-11TFH	3302502550	4	Open Loop	
TV1319	FP1295	FN1354		28416	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	JOHNNY USA 34-11H	3302502551	4	Open Loop	
TV1319	FP1295	FN1354		28417	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	HALEY USA 24-11H	3302502552	4	Open Loop	
TV1319	FP1295	FN1354		28418	T KUPPER USA 34 CTB	T KUPPER USA 34 PAD	T KUPPER USA 34 PAD	T KUPPER USA 34 CTB	COLE USA 24-11TFH	3302502553	4	Open Loop	
TV1332	FP1308	FN1372		34044	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	RAFTER X 44-35H	3302503356	4	Open Loop	
TV1332	FP1308	FN1372		34045	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	GUDMON 44-35TFH	3302503357	4	Open Loop	
TV1332	FP1308	FN1372		34046	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	TWO BAR 34-35H	3302503358	4	Open Loop	
TV1332	FP1308	FN1372		34047	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	LUCAS 34-35TFH	3302503359	4	Open Loop	
TV1332	FP1308	FN1372		35267	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	CATHERINE 44-35H	3302503559	4	Open Loop	
TV1332	FP1308	FN1372		35268	TWO BAR CTB	TWO BAR PAD	TWO BAR PAD	TWO BAR CTB	MCCRORY 44-35TFH	3302503560	4	Open Loop	
TV1384	FP1310	FN1427		21959	VANCE STROMMEN 2 CTB	VANCE STROMMEN PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	ELIZABETH STROMMEN 24-12H	3302501554	1	LEAF	
TV1384	FP1310	FN1427		21961	VANCE STROMMEN 2 CTB	VANCE STROMMEN PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	ELIZABETH STROMMEN 24-12TFH	3302501556	1	LEAF	
TV1384	FP1310	FN1427		17608	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 21 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 21-13H	3302500829	1	LEAF	
TV1384	FP1310	FN1427		17509	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41-13H	3302500807	1	LEAF	
TV1384	FP1310	FN1427		21960	VANCE STROMMEN 2 CTB	VANCE STROMMEN PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	VANCE STROMMEN 21-13H	3302501555	1	LEAF	
TV1384	FP1310	FN1427		21962	VANCE STROMMEN 2 CTB	VANCE STROMMEN PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	VANCE STROMMEN 21-13TFH	3302501557	1	LEAF	
TV1384	FP1310	FN1427		40025	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 21 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	MCKAY 11-13H	3302504722	1	LEAF	
TV1384	FP1310	FN1427		40026	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 21 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	DUNRUD 11-13TFH	3302504723	1	LEAF	
TV1384	FP1310	FN1427		40288	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	BOWERS 31-13H	3302504802	1	LEAF	
TV1384	FP1310	FN1427		40290	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	GRAYSON 41-13TFH	3302504804	1	LEAF	
TV1384	FP1310	FN1427		40289	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	MADSEN 41-13H	3302504803	1	LEAF	
TV1384	FP1310	FN1427		40287	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	SERUM 34-12H	3302504801	1	LEAF	
TV1384	FP1310	FN1427		40231	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	LILLEBRIDGE 44-12H	3302504780	1	LEAF	
TV1384	FP1310	FN1427		40286	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	NOREEN 44-12TFH	3302504800	1	LEAF	
TV1384	FP1310	FN1427		40285	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	MUGGLI 44-12H	3302504799	1	LEAF	
TV1384	FP1310	FN1427		40284	VANCE STROMMEN 2 CTB	NANETTE STROMMEN 41 PAD	VANCE STROMMEN PAD	VANCE STROMMEN 2 CTB	KELLOGG 14-7TFH	3302504798	1	LEAF	
TV1391	FP1356	FN1433		40612	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	BETTS 24-11 H	3302504871	4	Open Loop	
TV1391	FP1356	FN1433		40614	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	ELLIOT 34-11 TFH	3302504873	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40618	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	EUBANKS 44-11 TFH	3302504877	4	Open Loop	
TV1391	FP1356	FN1433		40613	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	FOSS 24-11 TFH	3302504872	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40617	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	PURRIER 44-11 H	3302504876	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40616	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	ROCKY 44-11 TFH	3302504875	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40609	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	SELMER 21-14 H	3302504888	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40611	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	SEVERSON 31-14 H	3302504870	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40610	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	SNEVE 31-14 TFH	3302504869	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40564	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	WHITAKER 34-11 H	3302504850	CD, I.V.A.7.c.(1)	LEAF	
TV1391	FP1356	FN1433		40615	WHITAKER CTB	WHITAKER PAD	WHITAKER PAD	WHITAKER CTB	ZWENKE 34-11 H	3302504874	CD, I.V.A.7.c.(1)	LEAF	
TV1353	FP1080	FN1395		29632	WILBERT 44-8H	DELIA USA PAD	DELIA USA PAD	WILBERT 44-8H	WILBERT 44-8H	3302502689	4	Open Loop	
TV1354	FP1330	FN1397		16422	WILLIAM KUKLA CTB	WILLIAM KUKLA PAD	WILLIAM KUKLA PAD	WILLIAM KUKLA CTB	KUKLA 34-34H	3302500606	4	Closed Loop	
TV1354	FP1330	FN1397		25760	WILLIAM KUKLA CTB	WILLIAM KUKLA PAD	WILLIAM KUKLA PAD	WILLIAM KUKLA CTB	WILLIAM KUKLA 24-34H	3302502181	4	Closed Loop	
TV1354	FP1330	FN1397		25761	WILLIAM KUKLA CTB	WILLIAM KUKLA PAD	WILLIAM KUKLA PAD	WILLIAM KUKLA CTB	KATHRYN KUKLA 14-34H	3302502182	4	Closed Loop	
TV1358	FP1075	FN1401		27346	WINSTON CTB	DAWN KUPPER PAD	DAWN KUPPER PAD	WINSTON CTB	CUSKELLY 34-10TFH	3302502404	4	Open Loop	
TV1358	FP1075	FN1401		27347	WINSTON CTB	DAWN KUPPER PAD	DAWN KUPPER PAD	WINSTON CTB	MARSHALL 34-10H	3302502405	4	Open Loop	
TV1358	FP1075	FN1401		27348	WINSTON CTB	DAWN KUPPER PAD	DAWN KUPPER PAD	WINSTON CTB	WINSTON 34-10TFH	3302502406	4	Open Loop	
TV1363	FP1337	FN1406		26015	YOUNG CTB	YOUNG PAD	YOUNG PAD	YOUNG CTB	REBECCA 31-26H	3302502213	4	Open Loop	
TV1363	FP1337	FN1406		26016	YOUNG CTB	YOUNG PAD	YOUNG PAD	YOUNG CTB	SCHAEFER 34-23TFH	3302502214	4	Open Loop	
TV1363	FP1337	FN1406		26017	YOUNG CTB	YOUNG PAD	YOUNG PAD	YOUNG CTB	ZIMMERMAN 21-26TFH	3302502215	4	Open Loop	
TV1363	FP1337	FN1406		36118	YOUNG CTB	YOUNG PAD	YOUN						

**APPENDIX B**

**Requirements for  
Open Loop Vapor Control Systems**



**APPENDIX B**

**Requirements for Open Loop Vapor Control Systems:  
Pressurized Liquid Sampling, Open Loop Modeling Guideline, Engineering Design  
Standards, Field Survey, Engineering Evaluation and Modification, Initial Verification,  
and Post-Certification of Completion Modifications**

1. Pressurized Liquid Sampling. Marathon collected and analyzed Pressurized Liquid samples from a cross-section of Well Pads in accordance with the Sampling and Analysis Plan (“SAP”) included in the Open Loop Modeling Guideline that the EPA approved on June 6, 2023.

2. Development of an Open Loop Modeling Guideline. Marathon developed a written modeling guideline (“Open Loop Modeling Guideline”) that the EPA approved on June 6, 2023. The purpose of the Open Loop Modeling Guideline is to determine Potential Peak Instantaneous Vapor Flow Rate (“PPIVFR”) for purposes of designing and adequately sizing Vapor Control Systems (“VCS”) and to provide procedures for achieving this objective.

a. The Open Loop Modeling Guideline shall address the following, where relevant and applicable:

- (1) Vapor sources (*e.g.*, atmospheric Storage Tanks and transfer and loading systems) tied or to be tied into the VCS that are not deemed to be negligible contributors;
- (2) The maximum operating pressure and minimum operating temperature from the last stage of separation prior to the Tank System;
- (3) Maximum potential stock tank liquid temperature;
- (4) Vapor pressure of the final weathered product transported from the Produced Oil tank(s);

- (5) The recycling of liquids from the Storage Tank(s) back to the upstream process equipment;
- (6) Estimation of highest potential flow rate of flash gas to the VCS utilizing: pressurized or atmospheric liquid sampling; lab analyses, including flash gas-to-oil ratio; process simulation; correlations; or any combination thereof;
- (7) Volume and duration of individual dump events, including the nature of the flow of liquids to the Separator or Heater Treater (*e.g.*, steady flow, slug flow, or intermittent flow, for example, due to discrete well cycling events); the minimum time between dump events; and the maximum number of dump events associated with a single well cycle with slug or intermittent flow, including where relevant and applicable:
  - (i) The type of dump valve control (*e.g.*, proportional, on/off) and dump valve size or trim size;
  - (ii) Size, length, and fittings of the liquid transfer line between the last stage of separation and the Storage Tank(s);
  - (iii) Consideration of simultaneous dump events to the same Tank System (unless all potential simultaneous dump events have been precluded through installation of timers, automation, or other measures); and
  - (iv) Consideration of the maximum design daily oil and water production rates and diurnal variations in these flows.
- (8) The calculation methods or simulation tools for processing the data inputs;



(9) The accuracy of the input data and results (*e.g.*, uncertainty of empirical correlations, representativeness of samples, process conditions); and

(10) Any other inputs needed to estimate the PPIVFR.

b. Marathon may periodically update the Open Loop Modeling Guideline, as appropriate. Should the Open Loop Modeling Guideline be updated, the use of the version current at the time of the Open Loop Engineering Evaluation is acceptable. Updates to the Open Loop Modeling Guideline do not in and of themselves require Marathon to repeat Open Loop Engineering Evaluations. Marathon shall submit substantive revisions to the Open Loop Modeling Guideline to the EPA for re-approval in the next Semi-Annual Report that follows the Reporting Period of the revisions.

3. Open Loop Engineering Design Standards and VCS Capacity. For each Open Loop VCS identified on Appendix A, Marathon shall develop Engineering Design Standards to assess the capacity in thousand standard cubic feet per day. The Engineering Design Standards may reside with the Open Loop Modeling Guideline in the same document (*i.e.*, “Oil Production Facility Storage Tank Vapor Control System Design, Guide to”) or the results of the Open Loop Engineering Evaluation (*e.g.*, design assessment or report). Marathon will apply Engineering Design Standards to each VCS at individual Tank Systems or to a Tank System group as identified on Appendix A.

a. These standards shall include, as appropriate:

(1) Vapor control equipment installed on the Tank System, including equipment-specific considerations and any associated pressure losses (*e.g.*, liquid knock-out drums, flame arrestors);

(2) Size and design of the piping system between the Storage Tank(s) and the emission control device, and the size and design of the emission control device (including consideration of equivalent pipe length and back pressure valves or other restrictions on vapor flow);

(3) Volume and duration of individual dump events; the nature of the flow of liquids to and from the Separator (*i.e.*, steady flow, slug flow, intermittent flow (*e.g.*, due to discrete well cycling events)); the minimum time between dump events; and the maximum number of dump events associated with a single well cycle with slug or intermittent flow;

(4) Minimum available headspace in the Storage Tank(s); and

(5) Engineering design considerations applied to account for issues associated with the VCS (*e.g.*, fouling, potential for liquids accumulation in lines, winter operations) and variability of data.

b. Marathon may rely on manufacturer specifications for individual components or pieces of equipment that are part of a VCS.

c. The EPA approved the Engineering Design Standards on April 11, 2024. Updates to the Engineering Design Standards do not in and of themselves require Marathon to repeat Open Loop Engineering Evaluations. Marathon shall submit site-specific Engineering Design Standards if requested by EPA.

4. Open Loop Tank System Field Survey, Engineering Evaluation, and Modification.

a. For each Open Loop VCS identified on Appendix A, Marathon shall conduct a one-time field survey with sufficient time to complete the requirements of this

Appendix B, Paragraph 4.a through 4.c. During the field survey, as defined herein, Marathon shall inventory tanks and equipment associated with each VCS and identify their configuration and operational status. Marathon may rely on work done one year prior to the Effective Date that meets the requirements set forth in this Paragraph to complete the one-time field survey. This evaluation shall include the following actions:

(1) A one-time evaluation of the condition of all PRDs, blowdown valves, mountings, and gaskets at each tank in the VCS, and the possibility of repairing, replacing, or upgrading such equipment to reduce the likelihood of VOC emissions;

(2) Marathon shall ensure that, at the time of the survey, every PRD is mounted with a suitable gasket to the Storage Tank at the Storage Tank attachment point in accordance with good engineering practices and manufacturer specifications;

(3) If while surveying the PRD's mountings and gaskets, Marathon observes Compromised Equipment, Reliable Information, or evidence of significant staining emanating from PRDs, Marathon shall repair, replace, or upgrade such equipment, as appropriate. However, nothing herein shall require Marathon to repair, replace, or upgrade Compromised Equipment on Shut-In Tank Systems and their associated VCS except that Marathon must repair, replace, or upgrade Compromised Equipment prior to resuming Normal Operations; and

(4) Marathon shall maintain records of the following information:

(i) The date each Tank System underwent this evaluation;

(ii) The name of the employee who performed the evaluation;

(iii) Whether Compromised Equipment, Reliable Information, or evidence of significant staining emanating from pressure relief valves was observed; and

(iv) What, if any, repair, replacement, upgrade, or other corrective action was performed, including a description of the existing PRD(s), the PRD's mounting or gasket, and a description of how that equipment was repaired or with what it was replaced/upgraded.

Descriptions of PRDs shall include pressure set points where such information is available, and descriptions of PRDs, mountings, or gaskets shall include the manufacturer and model where such information is available.

b. Open Loop VCS Engineering Evaluation. Using the results of the field survey activities described in Appendix B, Paragraph 4.a and the Open Loop Vapor Control System Engineering Design Standard described in Appendix B, Paragraph 3, Marathon shall then determine whether each Open Loop VCS at each Tank System is adequately designed and sized to handle the PPIVFR as calculated through the application of the Open Loop Modeling Guideline (“Open Loop Engineering Evaluation”). An Open Loop Engineering Evaluation is not required for a VCS at a Tank System that is Shut-In, which remains Shut-In, is dismantled, and for which all wells associated with the Tank System are plugged and abandoned before the termination of this Consent Decree.

c. Open Loop VCS Modification. For any Open Loop VCS that is not adequately designed and sized to handle the PPIVFR based on the Open Loop Engineering Evaluation, Marathon shall make all necessary modifications to change the PPIVFR (as recalculated using the Modeling Guideline) and/or increase the capacity of the VCS as determined in the applicable Open Loop Engineering Evaluation completed consistent with the Engineering Design Standards. Marathon shall ensure that the modifications result in a VCS that is adequately designed and sized to handle the PPIVFR, as determined through application of an Open Loop Engineering Evaluation consistent with the Engineering Design Standard.

5. Tank System Production Operations Shut-In. If Marathon has not completed all the requirements of Appendix B, Paragraph 4 by the deadlines set forth in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS), Marathon shall Shut-In all Production Operations associated with that Tank System by such deadline until the requirements of Consent Decree, Paragraph 26 are met. If the Production Operations are Shut-In, Marathon, for the sole purpose of taking corrective actions pursuant to Consent Decree Section IV.G (Reliable Information, Investigation, and Corrective Action), may resume Production Operations associated with that Tank System for a period not to exceed five Calendar Days.

6. Open Loop VCS Initial Verification. Except as otherwise provided in this Appendix B, Paragraph 5, Marathon shall complete the requirements of this Paragraph for each Tank System within 30 Calendar Days of the deadline in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS). For Tank Systems Shut-In as of the applicable deadline in the Consent Decree, Paragraph 26, Marathon

shall complete the requirements of Appendix B, Paragraph 6.a by no later than 60 Calendar Days after first resuming Normal Operations, and shall complete the requirements of Appendix B, Paragraph 6.b by the deadline for the next Semi-Annual Report that is due at least 60 Calendar Days after first resuming Normal Operations. For Tank Systems that have completed the Open Loop Engineering Evaluation as of the applicable deadline in the Consent Decree, Paragraph 26 but are Shut-In within 60 Calendar Days from the applicable Tank System deadline in Consent Decree, Paragraph 26, Marathon shall complete the requirements of Appendix B, Paragraph 6.a by no later than 30 Calendar Days after first resuming Normal Operations, and shall complete the requirements of Appendix B, Paragraph 6.b by the deadline for the next Semi-Annual Report that is due at least 60 Calendar Days after first resuming Normal Operations. Marathon will submit written notification to the EPA no later than the first Semi-Annual Report advising of any Open Loop VCS Shut-In by these dates.

a. Conduct an IR Camera Inspection of all Tank System openings (*i.e.*, PRDs) during Normal Operations, including while and immediately after Produced Oil is being sent to the Tank System from all associated Production Operations from the last points of separation equipped with a dump valve that are not Shut-In at the time of the IR Camera Inspection. In the event that the potential for simultaneous dump events has been precluded from the Production Operations that are not Shut-In yields the highest, non-precluded PPIVFR, conduct the IR Camera Inspection of the Tank System to confirm that the VCS is adequately designed and sized and no Reliable Information is detected. In the event that any of Production Operations associated with the Tank System are Shut-In at the time of this IR Camera Inspection, and the Production Operations that are Shut-In contribute to the highest, non-precluded PPIVFR, Marathon shall perform additional IR

Camera Inspection(s) in accordance with this subparagraph within 30 Calendar Days of resuming Production Operations necessary to operate the last points of separation equipped with a dump valve (*i.e.*, treaters, and/or VRTs) upstream of the Tank System.

b. Inspections under this Paragraph must be conducted pursuant to the IR Camera Inspection SOP prepared by Marathon and approved by EPA pursuant to Section IV.F of the Consent Decree (Periodic IR Camera Inspections). A video record of each IR Camera Inspection done to comply with this subparagraph shall be recorded and kept on file by Marathon. Marathon shall comply with the requirements of Section IV.G of the Consent Decree (Reliable Information, Investigation, and Corrective Action) in the event Reliable Information is observed while complying with requirements of this Paragraph.

7. Verification of Open Loop VCS Design Analysis. Marathon's Open Loop VCS Engineering Evaluations and Modifications shall be subject to the following verification process. By no later than 60 Calendar Days from the deadline in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS), Marathon shall conduct a verification process as required by the EPA-approved Open Loop VCS Verification Process Manual. Marathon shall:

a. Conduct a field visit to complete a Field Verification Form for each Open Loop VCS identified on Appendix A to verify modifications required in Appendix B, Paragraph 4.c (Open Loop VCS Modification) have been implemented and confirm the Open Loop VCS Engineering Evaluation critical parameters at each Open Loop VCS were accurately implemented and operational;

b. Verify site-specific inputs and assumptions used in the Open Loop VCS Engineering Evaluation as informed by the Open Loop Modeling Guideline and

Engineering Design Standards (*e.g.*, as applicable by the Open Loop Certification Checklist, such as the number of wells connected to the Tank System, well operation type, frequency and duration of dump events, minimum separator temperature and maximum separator pressure, maximum tank liquid level, Open Loop VCS piping set-up and configuration, vapor sources, etc.) utilizing its Certification Checklist (“the Checklist”). The Checklist was based upon the Open Loop Modeling Guideline and Engineering Design Standards. The Checklist identifies documents reviewed to verify site-specific inputs and assumptions to match the Open Loop VCS Engineering Evaluation;

c. Marathon shall then use the completed Field Verification Form to complete the Checklist for each Open Loop VCS on Appendix A to verify that: (i) all parameters from the Open Loop Tank System Field Survey were accurately reflected at each Tank System identified on Appendix A; (ii) critical parameters for PPIVFR were accurately reflected at each Open Loop VCS; (iii) the requirements of the Engineering Design Standards, such as flame arrestor size, PRD settings, and control devices are accurate; (iv) the Open Loop VCS modifications were accurately implemented and operational; and (v) the Initial IR Camera Verification was fully completed, timely, and any Reliable Information corrected;

d. Marathon shall follow its Open Loop VCS Verification Process Manual to repeat any requirements of Appendix B, Paragraphs 4-6, as necessary.

e. Marathon shall include the date and summary of outcomes, including if the verification process resulted in any necessary recompletion of Appendix B



requirements, of the Field Verification Form and Checklist for each Open Loop VCS in the next Semi-Annual Report after completion of this Paragraph 7.

8. Certification of Completion Report for Open Loop VCSs.

a. With the next Semi-Annual Report after completion of Appendix B, Paragraph 7 (Verification of Open Loop VCS Design Analysis), Marathon shall complete and submit to EPA a Certification of Completion Report. The Report shall be in either a spreadsheet or database format, and shall include the following information for each Open Loop VCS:

(1) The result of the Open Loop Engineering Evaluation, including the PPIVFR and VCS capacity;

(2) An identifier for the report associated with the Open Loop Engineering Evaluation consistent with the Engineering Design Standard (which could be for an individual Tank System) that was used for each Open Loop VCS;

(3) Identification of any Open Loop VCS Modifications made in accordance with Appendix B, Paragraph 4.c (Open Loop VCS Modification);

(4) Identification of site-specific or system-wide operational parameters or practices relied upon in the Open Loop Engineering Evaluation and determined by the Open Loop Engineering Evaluation to be necessary for verification during Normal Operations (*e.g.*, maximum operating pressure for final stage of separation);

(5) The minimum Tank System PRD Set Points;

(6) The date an IR Camera Inspection was completed to comply with Appendix B, Paragraph 6.a and the results of such inspection, along with any

corrective actions performed to address Reliable Information and the date and method of verification that the corrective action was successful;

(7) That the modeling performed in accordance with the Open Loop Modeling Guideline was steady state; and

(8) The dates and summary of outcomes from completion of the Field Verification Form and Checklist in accordance with the requirements in Appendix B, Paragraph 7 (Verification of Open Loop VCS Design Analysis).

b. Marathon shall update the Certification of Completion Report for any Tank System that was Shut-In at the time of the IR Camera Inspections required by Appendix B, Paragraph 6.a as part of the next Semi-Annual Report that follows at least 60 Days after such Production Operations were resumed so as to update the applicable information for the VCS as required by Appendix B, Paragraph 4.b.

9. Open Loop VCS Post-Certification of Completion Modifications. If, after Marathon has submitted a Certification of Completion Report for a Tank System associated with an Open Loop VCS to EPA, an operational or equipment change is made such that the (1) the PPIVFR is increased beyond what was evaluated in the Open Loop Engineering Evaluation; or (2) the Open Loop VCS capacity decreases below what was evaluated in the Open Loop Engineering Evaluation, Marathon shall:

a. Repeat all requirements of Appendix B, Paragraphs 4.b (Open Loop VCS Engineering Evaluation) and 4.c (Open Loop VCS Modification) within 30 Calendar Days of operational or equipment change outlined in this subparagraph and shall repeat all requirements of Appendix B, Paragraph 6.a within 30 Calendar Days of completing any necessary modifications in accordance with Appendix B, Paragraph 4.c (Open Loop

VCS Modification). Marathon shall use best efforts to repeat all requirements of Appendix B, Paragraphs 4.b and 4.c prior to any such change.

b. Submit in the next required Semi-Annual Report, or the Semi-Annual Report due at least 60 Days following completion of all requirements of Appendix B, Paragraph 6.a, an updated Certification of Completion Report for any Tank Systems that underwent another Open Loop VCS Engineering Evaluation in accordance with this Paragraph.

**APPENDIX C**

**Requirements for  
Closed Loop Vapor Control Systems**

## APPENDIX C

### **Requirements for Closed Loop Vapor Control Systems: Design Guideline, Field Survey, Engineering Evaluation, and Initial Verification**

1. Development of a Closed Loop VCS Design Guideline.
  - a. Marathon has developed a written design guideline (“Closed Loop Design Guideline”). The purpose of the Closed Loop Design Guideline is to describe the steps necessary to properly design, install, and optimize a Closed Loop VCS. For each designated VCS on Appendix A, Marathon will apply the Closed Loop Design Guideline to create a Closed Loop VCS.
    - b. The Closed Loop Design Guideline shall address the following:
      - (1) The creation of a site survey sheet to be used at each Closed Loop VCS, identifying the configuration of the VCS, pressure setting of PRDs, and the make and model of PRDs and inputs (both vapor and liquid) into the VCS;
      - (2) Description of the Closed Loop VCS Installation Phase (*i.e.*, the installation of hardware and software);
      - (3) Identification of the Trigger Point, Leak Point, and Set Point, including the methods by which each point will be determined;
      - (4) Description of the “optimization phase,” also referred to as the shakedown phase, *i.e.*, the phase following equipment installation and verification, during which the wells resume Normal Operations, and wherein calibration and tuning of the Closed Loop VCS occurs, including the duration of the optimization phase and the process for responding to exceedances of the Trigger Point during the optimization phase; and

(5) Description of a process of verification, which includes verification of installation of the Closed Loop VCS in the field, and verification that the Trigger Point is below the Leak Point via an IR Camera Inspection of the VCS pursuant to Appendix C, Paragraph 4.a(2)(ii), below.

c. Marathon submitted the Closed Loop Design Guideline to the EPA and the EPA approved the Closed Loop Design Guideline on April 11, 2024. Marathon may periodically update the Closed Loop Design Guideline as appropriate. Should the Closed Loop Design Guideline be updated, the use of the version current at the time of the Closed Loop Engineering Evaluation is acceptable. Updates to the Closed Loop Design Guideline do not in and of themselves require Marathon to redo Closed Loop Engineering Evaluations. Marathon shall submit substantive revisions to the Closed Loop Design Guideline to the EPA for re-approval in the next Semi-Annual Report that follows the Reporting Period of the revisions.

2. Closed Loop Tank System Field Survey, Engineering Evaluation, and Modification.

a. Closed Loop Tank System Field Survey. For each Closed Loop VCS identified on Appendix A, Marathon shall conduct a one-time field survey with sufficient time to complete requirements of this Appendix C, Paragraph 2.a (Closed Loop Tank System Field Survey) through 2.c (Closed Loop VCS Engineering Evaluation) by the applicable deadline in Consent Decree Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS). During the field survey, as defined herein, Marathon shall inventory tanks and equipment associated with each Closed Loop VCS and identify their configuration and operational status. Marathon will then apply the

Closed Loop Design Guideline to install a Closed Loop VCS. Marathon may rely on work done one year prior to the Effective Date that meets the requirements set forth in this Paragraph to complete the one-time field survey. This evaluation shall include the following actions:

(1) A one-time evaluation of the condition of all PRDs, blowdown valves, mountings, and gaskets at each tank in the Closed Loop VCS, and the possibility of repairing, replacing, or upgrading such equipment to reduce the likelihood of VOC emissions.

(2) Marathon shall ensure that, at the time of the survey, every PRD is mounted with a suitable gasket to the Storage Tank at the Storage Tank attachment point in accordance with good engineering practices and manufacturer specifications;

(3) If while surveying the PRDs, mountings, and gaskets, Marathon observes Compromised Equipment, Reliable Information, or evidence of significant staining emanating from PRDs, Marathon shall repair, replace, or upgrade such equipment, as appropriate. However, nothing herein shall require Marathon to repair, replace, or upgrade Compromised Equipment on Shut-In Tank Systems and their associated VCS except that Marathon must repair, replace, or upgrade Compromised Equipment prior to resuming Normal Operations; and

(4) Marathon shall maintain records of the following information:

(i) The date each Tank System underwent this evaluation;

(ii) The name of the employee who performed the evaluation;

(iii) Whether Compromised Equipment, Reliable Information, or evidence of significant staining emanating from pressure relief valves was observed; and

(iv) What, if any, repair, replacement, upgrade, or other corrective action was performed, including a description of the existing PRD, mounting, or gasket, and a description of how that equipment was repaired or with what it was replaced/upgraded. Descriptions of PRDs shall include pressure set points where such information is available, and descriptions of PRDs, mountings, or gaskets shall include the manufacturer and model where such information is available.

b. Closed Loop VCS Engineering Evaluation. Using the results of the field survey activities described in this Appendix C, Paragraph 2.a (Closed Loop Tank System Field Survey), and through application of the Closed Loop Design Guideline, Marathon shall install the necessary hardware and software to create a Closed Loop VCS (“Closed Loop Engineering Evaluation”). A Closed Loop Engineering Evaluation is not required for a VCS at a Tank System that is Shut-In, which remains Shut-In, is dismantled, and for which all wells associated with the Tank System are plugged and abandoned before the termination of this Consent Decree. Following creation of a Closed Loop VCS pursuant to this subparagraph, Marathon shall:

(1) Operate a Closed Loop VCS as required by this Appendix C and in a manner consistent with the Closed Loop Design Guideline beginning the first date of Normal Operations that follows creation of the Closed Loop VCS until Termination of the Tank System from this Consent Decree, or until the Tank



System becomes subject to the Appendix B requirements pursuant to Consent Decree, Paragraph 25.

(2) Operate the Closed Loop VCS to ensure the Tank System will be Shut-In at the Trigger Point.

(3) Operate the Closed Loop VCS to ensure that all wells associated with the Closed Loop VCS will Shut-In at the Leak Point.

(4) Operate the Closed Loop VCS to ensure the Tank System will Shut-In at the Pressure Alarm Fail. Prior to resuming Normal Operations following a Pressure Alarm Fail, Marathon shall repair or replace the pressure monitor.

(5) Equip all Closed Loop VCS with remote monitoring.

c. Closed Loop VCS Modification. If, at any time following installation of a Closed Loop VCS, Marathon replaces a PRD at a Closed Loop VCS with a PRD of a lower Set Point or different make and model, or lowers the Set Point of an existing PRD a new verification of the Leak Point pursuant to Appendix C, Paragraph 4.a(2)(ii), below, shall be performed (i) within five Calendar Days after the modification is completed, or (ii) if the Tank System is Shut-In, a new verification shall be performed by the date Normal Operations resume.

3. Tank System Production Operations Shut-In. If Marathon has not completed all the requirements of Appendix C, Paragraph 2 (Closed Loop Tank System Field Survey, Engineering Evaluation, and Modification) by the deadlines set forth in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS), Marathon shall Shut-In all Production Operations associated with that Tank System by such

deadline until the requirements of Paragraph 26 are met. If the Production Operations are temporarily Shut-In, Marathon for the sole purpose of taking corrective actions pursuant to Section IV.G. (Reliable Information, Investigation, and Corrective Action) may resume Production Operations associated with that Tank System for a period not to exceed five Calendar Days. No later than 60 Calendar Days after the applicable deadline in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS) for a Tank System on Appendix A, Marathon shall submit a written notification to EPA advising of any Tank Systems Shut-In as of the applicable deadline in Consent Decree, Paragraph 26 and where a Closed Loop VCS has not been installed.

4. Closed Loop VCS Verification of Engineering Evaluation. No later than two Calendar Days after Normal Operations has resumed at a VCS following installation of the Closed Loop VCS, Marathon shall conduct the verification in Appendix C, Paragraph 4.a, identified below. The optimization phase shall commence immediately upon resuming Normal Operations and will end 30 Calendar Days after first resuming Normal Operations.

a. Verification of a Closed Loop Engineering Evaluation shall include the following:

(1) A review to ensure that Marathon or its consultant installing the Closed Loop VCS correctly identified the site configuration and equipment in accordance with the site survey, and installed the appropriate equipment to create the Closed Loop VCS;

(2) Consistent with the Design Guideline, a verification:

(i) That the Production Operations will be Shut-In at the Trigger Point and the Leak Point;

(ii) Of the Leak Point via IR Camera Inspection, consistent with the Closed Loop Design Guideline. A video record of each IR Camera Inspection done to comply with this subparagraph shall be recorded and kept on file; and

(iii) That the control valve(s) in the Closed Loop VCS actuate in response to the control logic.

b. Certification of Completion Report for Closed Loop VCSs. Complete and submit to EPA with the next Semi-Annual Report or the Semi-Annual Report due at least 30 Calendar Days following the end of the optimization phase a Certification of Completion Report, in a spreadsheet or database format for each Closed Loop VCS, except as identified in Appendix C, Paragraph 4.d, that includes the following information:

(1) The date when installation of all necessary hardware and software to create a Closed Loop VCS was completed;

(2) The date a Tank System or tanks in any Tank System were first in Normal Operations following the installation of a Closed Loop VCS (*i.e.*, the date the optimization phase began);

(3) The information described in Appendix C Paragraph 2.a(4);

(4) The Trigger Point, Set Point, and Leak Point for each Closed Loop VCS, and the method by which each point was determined; and

(5) A summary of the results of the verification of the Closed Loop Engineering Evaluation for each applicable Closed Loop VCS, including a

certification that the verification was performed in accordance with Appendix C, Paragraph 4.a (Verification of Closed Loop Engineering Evaluation).

c. Following the optimization period for each Closed Loop VCS, Marathon shall record the following data: tank pressure data, pressure alarms, and Shut-In events. The alarm and Shut-In log will include records of the date and time of the alarms at, and duration of exceedances of, the Trigger Point and Leak Point; the date and time of any Pressure Alarm Fail; the cause and corrective action associated with any such alarms; and any instances in which the actuation of the Closed Loop VCS control logic automatically Shut-In separator(s) and or well(s).

d. Marathon shall retain the data recorded by the pressure monitors associated with the Closed Loop VCS required pursuant to Appendix C, Paragraph 4.c for two years from the date of recording. Marathon shall provide this data to the EPA upon request.

## **APPENDIX D**

# **Requirements for Lowest Emission Automated Facility Design and Verification**

## Appendix D

### Lowest Emission Automated Facility Design Requirements and Design Verification

1. Development of a LEAF Closed Loop Vapor Control System Design Guideline.

a. Marathon shall develop a written LEAF Closed Loop Vapor Control System design guideline (“LEAF Closed Loop Vapor Control System Design Guideline”) and submit it for review and approval to the EPA within 90 Calendar Days of the Date of Lodging of the Consent Decree. The purpose of the LEAF Closed Loop Vapor Control System Design Guideline is to describe the steps necessary to properly design, install, and optimize a LEAF Closed Loop Vapor Control System. For each LEAF Vapor Control System identified on Appendix A, Marathon will apply the LEAF Closed Loop Vapor Control System Design Guideline to create a LEAF Closed Loop Vapor Control System.

b. The LEAF Closed Loop Vapor Control System Design Guideline shall address, at a minimum, the following:

(1) The creation of a site survey sheet to be used at each LEAF Closed Loop Vapor Control System, identifying the configuration of the LEAF Vapor Control System, make, model, and Set Point of Pressure Safety Valves (“PSV”), configuration, make, and model of the Emergency Depressurization Valve (“EDV”), and inputs (both vapor and liquid) into the LEAF Vapor Control System;

(2) Description of the LEAF Closed Loop Vapor Control System Installation Phase (*i.e.*, the installation of hardware and software);

(3) Identification of the Trigger Point, EDV Actuation Point, and PSV Set Point, including the methods by which each point will be determined;

(4) Description of the “optimization phase,” also referred to as the shakedown phase, *i.e.*, the phase following equipment installation and verification, during which the wells resume Normal Operations and wherein calibration and tuning of the LEAF Closed Loop Vapor Control System occurs, including the duration of the optimization phase and the process for responding to exceedances of the Trigger Point during the optimization phase; and

(5) Description of a process of verification, which includes verification of installation of the LEAF Closed Loop Vapor Control System in the field, verification the EDV Actuation Point is below the PSV Set Point, and verification that the Trigger Point is below the EDV Actuation Point.

c. Marathon may periodically update the LEAF Closed Loop Vapor Control System Design Guideline as appropriate. Should the LEAF Closed Loop Vapor Control System Design Guideline be updated, the use of the version current at the time of the LEAF Closed Loop Engineering Evaluation is acceptable. Updates to the LEAF Closed Loop Vapor Control System Design Guideline, on its own, do not require Marathon to conduct new LEAF Closed Loop Engineering Evaluations. Substantive revisions to the LEAF Closed Loop Vapor Control System Design Guideline shall be submitted for re-approval by the EPA.

2. Closed Loop Vapor Control System LEAF Tank System Field Survey, Engineering Evaluation, and Modification.

a. Closed Loop LEAF Tank System Field Survey. For each existing LEAF Closed Loop Vapor Control System identified on Appendix A, Marathon shall conduct a one-time field survey with sufficient time to complete requirements of this Appendix D,

Paragraph 2 by the deadline in Consent Decree, Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS). During the field survey, as defined herein, Marathon shall inventory LEAF Storage Tanks and equipment associated with each LEAF Closed Loop Vapor Control System and identify the configuration and operational status. Marathon will then apply the LEAF Closed Loop Vapor Control System Design Guideline to install a LEAF Closed Loop Vapor Control System. Marathon may rely on work done one year prior to the Effective Date that meets the requirements set forth in this Paragraph to complete the one-time field survey. This evaluation shall include the following actions:

(1) A one-time evaluation of the condition of all PSVs, pressure monitors, VRUs, and flare flow meters at each LEAF Storage Tank and the EDV in the LEAF Closed Loop Vapor Control System. Evaluate the possibility of repairing, replacing, or upgrading such equipment to reduce the likelihood of VOC emissions;

(2) If while surveying the PSVs, Marathon observes Compromised Equipment, Reliable Information, or evidence of significant staining emanating from PSVs, Marathon shall repair, replace, or upgrade such equipment, as appropriate. Nothing herein shall require Marathon to repair, replace, or upgrade Compromised Equipment on Shut-In LEAF Tank Systems and their associated LEAF Vapor Control System except that Marathon must repair, replace, or upgrade Compromised Equipment prior to resuming Normal Operations; and

(3) Marathon shall maintain records of the following information:



- (a) The date each LEAF Tank System underwent this evaluation;
- (b) The name of the employee or authorized contactor who performed the evaluation;
- (c) Whether Compromised Equipment, Reliable Information, or evidence of significant staining emanating from PSVs were observed;
- (d) What, if any, repair, replacement, upgrade, or other corrective action was performed, including a description of the existing PSV and a description of how that equipment was repaired or with what it was replaced/upgraded. Descriptions of PSVs shall include pressure Set Point and shall include the manufacturer and model; and
- (e) A description of the EDV manufacturer and model and the EDV Actuation Point.

b. LEAF Closed Loop Vapor Control System Engineering Evaluation. For each existing LEAF Closed Loop Vapor Control System identified on Appendix A, using the results of the field survey activities described in this Appendix D, Paragraph 2.a (Closed Loop LEAF Tank System Field Survey), and through application of the LEAF Closed Loop Vapor Control System Design Guideline, Marathon shall install the necessary hardware and software to create a Closed Loop Vapor Control System (“LEAF Closed Loop Engineering Evaluation”). For New Well Pads, Marathon shall install the necessary hardware and software to create a Closed Loop Vapor Control System upon startup of production. A LEAF Closed Loop Engineering Evaluation is not required for a LEAF Vapor Control System at a LEAF Tank System that is Shut-In, which remains

Shut-In, is dismantled, and for which all wells associated with the LEAF Tank System are plugged and abandoned before the termination of the Consent Decree. Following creation of a LEAF Closed Loop Vapor Control System pursuant to this Paragraph 2.b, Marathon shall:

(1) Operate a LEAF Closed Loop Vapor Control System as required by this Appendix D and in a manner consistent with the LEAF Closed Loop Vapor Control System Design Guideline beginning the first date of Normal Operations that follows creation of the Closed Loop Vapor Control System until termination of the Consent Decree.

(2) Operate the LEAF Closed Loop Vapor Control System to ensure Production Operations to the LEAF Tank System will Shut-In at the Trigger Point.

(3) Operate the LEAF Closed Loop Vapor Control System to ensure that all wells associated with the LEAF Closed Loop Vapor Control System will be Shut-In at the EDV Actuation Point.

(4) Operate the LEAF Closed Loop Vapor Control System to ensure the Trigger Point is below the EDV Actuation Point.

(5) Operate the LEAF Closed Loop Vapor Control System to ensure the LEAF Tank System will Shut-In when all pressure monitors installed on the LEAF Tank System register a Pressure Alarm Fail. Prior to resuming Normal Operations following a Pressure Alarm Fail, Marathon shall repair or replace the pressure monitor(s).

(6) Equip all LEAF Closed Loop Vapor Control Systems with remote monitoring.

c. LEAF Closed Loop Vapor Control System Modification. If, at any time following installation of a LEAF Closed Loop Vapor Control System, Marathon performs one of the following activities, a new verification of the EDV Actuation Point pursuant to Appendix D, Paragraph 4.a(2)(c), shall be performed (i) within five Calendar Days after the modification is completed or, (ii) if the LEAF Tank System is Shut-In pursuant to Appendix D, Paragraph 3, by the date Normal Operations resume:

- (1) replaces a LEAF Storage Tank PSV at a LEAF Closed Loop Vapor Control System with a PSV of a lower Set Point,
- (2) increases the EDV Actuation Point, or
- (3) Replaces one or more existing LEAF Storage Tanks with a non-atmospheric vessel of lower maximum allowable working pressure.

Marathon shall re-submit a modified Certification of Completion Report in accordance with Appendix D, Paragraph 4.b (LEAF Site Certification of Completion Report).

3. LEAF Tank System Production Operations Shut-In.

a. For each existing LEAF Closed Loop Vapor Control System identified on Appendix A, if Marathon has not completed all the requirements of Appendix D, Paragraph 1 (Development of a LEAF Closed Loop Vapor Control System Guideline) through 2 (Closed Loop Vapor Control System LEAF Tank System Field Survey, Engineering Evaluation, and Modification) by the applicable deadline set forth in Paragraph 26 (Deadlines for Implementation of Design Requirements at Appendix A TVCS) of the Consent Decree, Marathon shall Shut-In all Production Operations

associated with that LEAF Tank System by such deadline until completion of the requirements of Appendix D, Paragraphs 1 through 2.

b. For New Wells Pads, if Marathon has not completed all the requirements of Appendix D, Paragraphs 1, 2.b., and 2.c by the applicable deadline set forth in Paragraph 27 (New Well Pads) of the Consent Decree, Marathon shall Shut-In all Production Operations associated with that LEAF Tank System by such deadline until completion of the requirements of Appendix D, Paragraphs 1, 2.b., and 2.c.

c. If the Production Operations are temporarily Shut-In, Marathon, for the sole purpose of taking corrective actions pursuant to Section IV.G. (Reliable Information, Investigation, and Corrective Action), may resume Production Operations associated with that LEAF Tank System for a period not to exceed five Calendar Days. No later than 60 Calendar Days after the applicable deadline in Paragraphs 26 or 27, Marathon shall submit a written notification to the EPA advising of any LEAF Tank Systems Shut-In as of the applicable deadline in Paragraphs 26 and 27 and where a LEAF Closed Loop Vapor Control System has not been installed.

4. LEAF Closed Loop Vapor Control System Verification of Engineering Evaluation. No later than five Calendar Days after Normal Operations resume at an existing LEAF Vapor Control System following installation of the LEAF Closed Loop Vapor Control System, or no later than five Calendar Days after startup of production at a New Well Pad, Marathon shall conduct the verification in Paragraph 4.a. The optimization phase shall commence immediately upon resuming Normal Operations and will end 30 Calendar Days after first resuming Normal Operations.

a. Verification of a LEAF Closed Loop Engineering Evaluation shall include the following:

(1) A review to ensure that Marathon or its representative that installed the LEAF Closed Loop Vapor Control System correctly installed the appropriate equipment to create the LEAF Closed Loop Vapor Control System;

(2) Consistent with the LEAF Closed Loop Vapor Control System Design Guideline, a verification:

(a) That the Production Operations will be Shut-In at the Trigger Point and the EDV Actuation Point;

(b) That the Trigger Point is below the EDV Actuation Point;

(c) An IR Camera Inspection, consistent with the LEAF Closed Loop Vapor Control System Design Guideline, to verify that no VOC emissions are observed from the LEAF Tank System at the EDV Actuation Point. A video record of each IR Camera Inspection done to comply with this subparagraph shall be recorded and kept on file; and

(d) That the valve(s) in the LEAF Closed Loop Vapor Control System actuate in response to the control logic.

b. LEAF Site Certification of Completion Report. Marathon shall complete and submit to the EPA with the next Semi-Annual Report following the end of the optimization phase, a Certification of Completion Report including the following information, in a spreadsheet or database format for each LEAF Closed Loop Vapor Control System:

(1) The date when installation of all necessary hardware and software to create a LEAF Closed Loop Vapor Control System was completed;

(2) The date a LEAF Tank System or LEAF Storage Tanks in any LEAF Tank System were first in Normal Operations following the installation of a LEAF Closed Loop Vapor Control System (*i.e.*, the date the optimization phase began);

(3) The information in Paragraphs 1.b(1) for New Well Pads and 2.a(3) field surveys for existing LEAF Closed Loop Vapor Control System(s);

(4) The Trigger Point, PSV Set Point, and EDV Actuation Point for each LEAF Closed Loop Vapor Control System, and the method by which each point was determined; and

(5) A summary of the results of the verification of the LEAF Closed Loop Engineering Evaluation for each applicable Closed Loop Vapor Control System, including a certification that the verification of the Closed Loop Engineering Evaluation was performed in accordance with Appendix D, Paragraph 4.a.

c. Following the optimization period for each LEAF Closed Loop Vapor Control System, Marathon shall record the following data: LEAF Tank System pressure data, pressure alarms, and Shut-In events. The alarm and Shut-In log will include records of the date and time of the alarms, duration of the Trigger Point, and EDV Actuation Point; the date and time of any Pressure Alarm Fail; the cause and corrective action associated with any such alarms; and any instances in which the LEAF Closed Loop Vapor Control System control logic automatically Shut-In separator(s) and or well(s).

d. Marathon shall retain the data recorded by the pressure monitors associated with the LEAF Closed Loop Vapor Control System required pursuant to Appendix D, Paragraph 4.c for two years from the date of recording. Marathon shall provide this data to the EPA upon request.

## **APPENDIX E**

# **Environmental Mitigation Projects**



**Appendix E**  
**Environmental Mitigation Projects**

1. Marathon shall comply with the requirements of this Appendix and with Section V (Environmental Mitigation Projects) of the Consent Decree to implement and secure the environmental benefits of each Project described herein.

2. Nothing in this Appendix shall relieve Marathon of its obligation to comply with all applicable federal, state, and local laws and regulations in implementing the Projects, including any requirement to obtain permits under the Clean Air Act.

**I. IR Camera Monitoring Project with MHA Nation**

3. Marathon shall purchase and ship two new IR Cameras to the MHA Energy Division for use by MHA Energy Division inspectors to identify and resolve illicit hydrocarbon emissions from oil and gas production facilities on the FBIR (the “IR Camera Monitoring Project”). The EPA estimates that the IR Camera Monitoring Project is anticipated to reduce 208.16 tons of VOCs and 304.95 metric tons of carbon dioxide equivalent (“CO<sub>2</sub>e”) per year.

4. Within 30 Days of the Effective Date, Marathon shall submit to the EPA for review and approval an IR Camera Monitoring Project with MHA Project Plan, which includes the following:

- a. Schedule and point of delivery of IR Cameras not to exceed 90 Days after the Effective Date;
- b. Make and Model of IR Cameras;
- c. Estimated cost; and
- d. The Project Certification required by Paragraph 60 of the Consent Decree.

5. Project Completion Notice. Upon completion of the IR Camera Monitoring Project, Marathon shall submit a notice of completion to the EPA in accordance with Section XV

(Notices) of the Consent Decree. The notice shall include notice of shipment and proof of delivery, along with the dated invoices or receipts of purchase of the IR Cameras.

## **II. Pneumatic Controller Retrofit or Replacement Project**

6. Marathon shall replace or retrofit Tank System pneumatic controllers to reduce or eliminate emissions of VOCs and other air pollutants (the “Pneumatic Controller Retrofit or Replacement Project Plan”). The Pneumatic Controller Retrofit or Replacement Project Plan applies to all Marathon Tank Systems with pneumatic controllers that, as of September 30, 2023, were not subject to the requirements of NSPS OOOOb, and release emissions to the atmosphere in North Dakota. The Pneumatic Controller Retrofit or Replacement Project is anticipated to reduce approximately 590 tons of VOCs and 27,950 metric tons of CO<sub>2</sub>e per year via the replacement, retrofit, or elimination of approximately 870 venting pneumatic devices. The Pneumatic Controller Retrofit or Replacement Project must be completed no later than June 30, 2025.

7. No later than 30 Days after the Effective Date, Marathon shall submit to the EPA for review and approval a Pneumatic Controller Retrofit or Replacement Project Plan, which includes the following:

- a. A list of Tank Systems in North Dakota not subject to the requirements of NSPS OOOOb as of September 30, 2023;
- b. An estimated inventory of all pneumatic controllers located at Tank Systems described above with the appropriate replacement action;
- c. A description of the anticipated environmental benefits of the Project, including an estimate of VOC, methane, hazardous air pollutant (“HAP”), and CO<sub>2</sub>e emissions reductions from each retrofit or replacement and the calculation methodology for determining emissions reductions;

- d. Estimated Project costs; and
- e. The Project Certification required by Paragraph 60 of the Consent Decree.

8. Marathon shall implement the Pneumatic Controller Retrofit or Replacement Project in compliance with the approved Pneumatic Controller Retrofit or Replacement Project Plan and schedule therein.

9. In accordance with Section VIII (Periodic Reporting Requirements) of the Consent Decree, Marathon shall submit the following information in each Semi-Annual Report:

- a. The location, date, and estimated emissions reductions associated with each pneumatic controller replacement or retrofit completed during the Compliance Reporting Period;
- b. Identification of the specific process vessels and devices on each process vessel that were retrofitted, replaced, re-routed, or eliminated;
- c. Identification of the method for mitigating the venting pneumatics as one of the following: elimination, replacement with an electric device, re-routing of gas to an internal vent, or routing of gas to a control device; and
- d. The Tank Systems planned for pneumatic controller retrofits or replacements in the following Compliance Reporting Period.

10. Project Completion Notice. Upon completion of the Pneumatic Controller Retrofit or Replacement Project, Marathon shall submit a notice of completion to the EPA in accordance with Section XV (Notices) of the Consent Decree. The notice shall include the final costs, estimated final total emission reductions achieved as of the date of the notice, as well as a projected annualized emission reduction, locations, and dates of all pneumatics replaced, retrofitted, or eliminated as part of this Project.

### **III. Shop-Built Flare Replacement Project**

11. Marathon shall eliminate shop-built flares at Tank Systems in North Dakota by either (1) replacing them with engineered flares; or (2) re-routing oil from wells that produce to Tank Systems controlled by shop-built flares to Tank Systems that control emissions with engineered flares (the “Shop-Built Flare Replacement Project Plan”). The Shop-Built Flare Replacement Project is anticipated to reduce 117 tons of VOCs and 690 metric tons of CO<sub>2</sub>e per year. The Shop-Built Flare Replacement Project must be completed no later than June 30, 2025.

12. No later than 30 Days after the Effective Date, Marathon shall submit to the EPA for review and approval a Shop-Built Flare Replacement Project Plan, which includes the following:

a. A list of each Tank System where a shop-built flare will be replaced with an engineered flare or where production will be re-routed from a Tank System with a shop-built flare to another tank System with an engineered flare;

b. A description of the anticipated environmental benefits of the Project, including an estimate of VOC, methane, HAP, nitrogen oxide, and CO<sub>2</sub>e emissions reductions from each replacement or re-routing and the calculation methodology for determining emissions reductions;

c. Estimated Project costs; and

d. The Project Certification required by Paragraph 60 of the Consent Decree.

13. Marathon shall implement the Shop-Built Flare Replacement Project in compliance with the approved Shop-Built Flare Replacement Project Plan and schedule therein.

14. In accordance with Section VIII (Periodic Reporting Requirements) of the Consent Decree, Marathon shall submit the following information in each Semi-Annual Report:

a. The date, location, and estimated emissions reductions associated with each shop-built flare replaced with an engineered flare during the Compliance Reporting Period;

b. The date, location, and estimated emissions reductions associated with each Tank System using a shop-built flare that had oil production re-routed to another Tank System using an engineered flare during the Compliance Reporting Period; and

c. The Tank System of planned shop-built flare replacements or re-routing of oil for the following Compliance Reporting Period.

15. Project Completion Notice. Upon completion of the Shop-Built Flare Replacement Project, Marathon shall submit a notice of completion to the EPA in accordance with Section XV (Notices) of the Consent Decree. The notice shall include the final costs; final total estimated emission reductions achieved as of the date of the notice as well as a projected annualized emission reduction; and locations and dates of replacement or re-routing of oil for all shop-built flares.

#### **IV. New and Reconstructed Well Pad Emission Reduction Project**

16. Marathon shall route at least 60 million barrels of oil from new, existing, or refractured wells, including all oil from New Well Pads constructed consistent with Appendix D, to Lowest Emitting Automated Facility (“LEAF”) Sites instead of traditional facilities. The New and Reconstructed Well Pad Emission Reduction Project is anticipated to reduce approximately 19,000 tons of VOCs and approximately 950,000 metric tons of CO<sub>2</sub>e.

17. The requirements of this Section IV, or a tank system design approved by the EPA that achieves greater or equivalent emission reductions, shall also apply to Well Pads constructed by Marathon after the Date of Lodging in North Dakota on property that Marathon acquires after the Date of Lodging, unless it is infeasible to do so. This obligation is complete at

the time Marathon submits the Project Completion Notice for the New and Reconstructed Well Pad Emission Reduction Project in accordance with Paragraph 22 of Appendix E.

18. Each Well Pad subject to the New and Reconstructed Well Pad Emission Reduction Project (“New or Reconstructed Well Pads”) must meet the requirements of Appendix D of the Consent Decree, which includes, in part, the following elements:

- a. Produced gas from separation stages prior to the storage vessels and operating below sales line pressure must be compressed, if needed, and is generally sold or used for other beneficial use;
- b. Utilization of non-atmospheric LEAF Storage Tanks;
- c. Installation of the LEAF Closed Loop Vapor Control System Requirements in Appendix D, which include criteria for automatic Shut-Ins;
- d. Gas collected from LEAF Storage Tanks used to manage oil and water is routed to VRUs and generally sold;
- e. VRU compression must be electric motor-driven;
- f. LEAF Storage Tanks must not include thief hatches; and
- g. Flare(s) must have flow meters and electronic pilot light monitors.

19. By no later than 30 Days after the Effective Date, Marathon shall submit a New and Reconstructed Well Pad Emission Reduction Project Plan, which includes the following:

- a. A list of proposed locations for New or Reconstructed Well Pads planned for the upcoming Compliance Reporting Period and Well Pads or Reconstructed Well Pads completed as of the Plan’s submission date;
- b. A representative process flow diagram for New or Reconstructed Well Pads;

c. A description of the anticipated environmental benefits of the Project, including an estimate of VOC, HAP, methane, and CO<sub>2</sub>e emissions reductions from each LEAF Site over Marathon's traditional facility design and the calculation methodology for determining emissions reductions;

d. Estimated project costs supporting the cost differences between traditional and LEAF Sites; and

e. The Project Certification required by Paragraph 60 of the Consent Decree.

20. Marathon shall implement the New and Reconstructed Well Pad Emission Reduction Project in compliance with the approved New and Reconstructed Well Pad Emission Reduction Project Plan and schedule therein.

21. In accordance with Section VIII (Periodic Reporting Requirements) of the Consent Decree, Marathon shall submit the following information in each Semi-Annual Report:

a. The location, date, barrels of oil produced, and estimated emissions reductions associated with each LEAF Site constructed during the Compliance Reporting Period; and

b. The proposed location of each New or Reconstructed Well Pad planned for the following Compliance Reporting Period.

22. Project Completion Notice. Upon completion of the New and Reconstructed Well Pad Emission Reduction Project, Marathon shall submit a notice of completion to the EPA in accordance with Section XV (Notices) of the Consent Decree. The notice shall include the final costs, final total estimated emission reductions achieved as of the date of the notice as well as a projected annualized emission reduction, locations, dates, and barrels of oil produced of all New and Reconstructed Well Pad Emission Reduction Project LEAF Site installations.

## **APPENDIX F**

### **Consent Decree Deadline Table**



## Appendix F: Deadlines for Injunctive Relief and Mitigation Requirements

CD Section	Paragraph Reference	Requirement	CD Deadline	Date of Deadline
IV.C (Third-Party Audits)	21(b)(3)(b)	Audit Group 1 synthetic minor applications	Prior to submittal of permit application (applications due 60 Days after Effective Date)	
IV.A (Air Pollution Source Permitting)	7(b), 7(d)	Submit Group 1 synthetic minor applications and implement Paragraph 10 federally enforceable permit conditions	60 Days after Effective Date	
IV.C (Third-Party Audits)	21(b)(3)(b)	Audit Group 2 synthetic minor applications	Prior to submittal of permit application (applications due 150 Days after Effective Date)	
IV.A (Air Pollution Source Permitting)	7(b), 7(d)	Submit Group 2 synthetic minor applications and implement Paragraph 10 federally enforceable permit conditions	150 Days after Effective Date	
IV.A (Air Pollution Source Permitting)	7(b), 7(d)	Submit Group 3 synthetic minor applications and implement Paragraph 10 federally enforceable permit conditions	300 Days after Effective Date	
IV.C (Third-Party Audits)	21(b)(3)(c)	Audit of Group 3 synthetic minor applications	30 Days after submittal of permit application	
IV.C (Third-Party Audits)	21(b)(3)(a)	Audit of permit applications for New Wells constructed in calendar years 2024-2025	Prior to submittal of permit application	
IV.A (Air Pollution Source Permitting)	7(c)(1), 7(d)	Submit synthetic minor applications and implement Paragraph 10 federally enforceable permit conditions for New Well Pads constructed within 90 Days of the Effective Date	120 Days after Effective Date	
IV.A (Air Pollution Source Permitting)	7(c)(2), 7(d)	Submit synthetic minor applications and implement Paragraph 10 federally enforceable permit conditions for New Well Pads constructed after 90 Days of the Effective Date	60 Days prior to construction	
IV.C (Third-Party Audits)	21(b)(3)(c)	Audit of permit applications for New Wells constructed in calendar year 2026 onward	30 Days after submittal of permit application	
IV.A (Air Pollution Source Permitting)	11	Post VOC PTE for each Well Pad or New Well Pad, along with the well name(s) and latitude and longitude for each well, on a public domain Marathon website.	30 Days of submittal of permit application	
IV.A (Air Pollution Source Permitting)	11	Post actual VOC emissions for each Well Pad or New Well Pad	Within 30 Days of calculation of 12-month rolling total	
IV.C (Third-Party Audits)	21	Proposed Audit Work Plan	Date of Lodging	
IV.D (Design Requirements)	26(a)	Implementation of design requirements at Group 1 TVCS	60 Days after Effective Date	
IV.D (Design Requirements)	26(a)	Implementation of design requirements at Group 2 TVCS	150 Days after Effective Date	
IV.D (Design Requirements)	26(a)	Implementation of design requirements at Group 3 TVCS	300 Days after Effective Date	
IV.D (Design Requirements)	26(a)	Implementation of design requirements at Group 4 TVCS	400 Days after the Effective Date	
IV.D (Design Requirements)	27	Implementation of Appendix D requirements at New Well Pads	Within 5 Days of the startup of production	
IV.D (Design Requirements)	Appendix B, Paragraph 6	Open Loop VCS Initial Verification	30 Days after the applicable deadline in CD Paragraph 26(a)	
IV.D (Design Requirements)	Appendix B, Paragraph 7	Verification of Open Loop VCS Design Analysis	60 Days after the applicable deadline in CD Paragraph 26(a)	
IV.D (Design Requirements)	Appendix C, Paragraph 4	Closed Loop VCS Verification of Engineering Evaluation	2 Calendar Days after Normal Operations resume following the installation of the Closed Loop Vapor Control System	
IV.D (Design Requirements)	Appendix D, Paragraph 1	LEAF Closed Loop Vapor Control System design guideline	90 Days after the Date of Lodging	

## Appendix F: Deadlines for Injunctive Relief and Mitigation Requirements

CD Section	Paragraph Reference	Requirement	CD Deadline	Date of Deadline
IV.D (Design Requirements)	Appendix D, Paragraph 4	LEAF Closed Loop Vapor Control System Verification of Engineering Evaluation for existing LEAF Vapor Control Systems	5 Calendar Days after Normal Operations resume following installation of the LEAF Closed Loop Vapor Control System or Startup of Production at a New Well Pad	
IV.E (Directed Inspection and Preventative Maintenance Program)	29-30	Implementation of Directed Inspection and Preventative Maintenance Program	60 Days after Effective Date	
IV.E (Directed Inspection and Preventative Maintenance Program)	32	Annual Evaluation of Directed Inspection and Preventative Maintenance Program	1 year after Effective Date, then annually thereafter	
IV.F (Periodic IR Camera Inspections)	33-37	Implement an IR Camera Inspectino program	Date of Lodging	
IV.F (Periodic IR Camera Inspections)	33-37	Begin IR Camera Inspections at New Well Pads	30 Days after Startup of Production	
IV.G (Reliable Information, Investigation, and Corrective Action)	38-44	Reliable Information, Investigation, and Corrective Action requirements	Date of Lodging	
IV.H (Tank System Electronic Pressure Monitoring)	46	Group 1 Open Loop tank system pressure monitor installation and callibration	60 Days after Effective Date	
IV.H (Tank System Electronic Pressure Monitoring)	46	Group 2 Open Loop tank system pressure monitor installation and callibration	150 Days after Effective Date	
IV.H (Tank System Electronic Pressure Monitoring)	46	Group 3 Open Loop tank system pressure monitor installation and callibration	300 Days after Effective Date	
IV.H (Tank System Electronic Pressure Monitoring)	46	Group 4 Open Loop tank system pressure monitor installation and callibration	400 Days after Effective Date	
IV.H (Tank System Electronic Pressure Monitoring)	47	Performance optimization period for open loop tank pressure monitors	60 Days after Tank System is modified in compliance with Appendix B, Paragraph 4(c)	
IV.H (Tank System Electronic Pressure Monitoring)	48	Tank pressure monitor Trigger Point and Leak Point development	60 Days after Tank System group deadline in Paragraph 26	
Section V. Environmental Mitigation Projects	Appendix E	Installation of pneumatic retrofit or replacement	30-Jun-25	30-Jun-25
Section V. Environmental Mitigation Projects	Appendix E	IR Camera Monitoring Project with MHA Nation	30 Days after the Effective Date	
Section V. Environmental Mitigation Projects	Appendix E	Shop Built Flare Replacement Project	30-Jun-25	30-Jun-25
Section V. Environmental Mitigation Projects	62	Project completion notice	60 Days following completion of the mitigation project	