

Subpart 3173 – Requirements for Site Security and Production Handling

§ 3173.1 Definitions and acronyms.

(a) As used in this subpart, the term: Access means the ability to:

(i) Add liquids to or remove liquids from any tank or piping system, through a valve or combination of valves or by moving liquids from one tank to another tank; or

(ii) Enter any component in a measuring system affecting the accuracy of the measurement of the quality or quantity of the liquid being measured.

Appropriate valves means those valves that must be sealed during the production or sales phase (e.g., fill lines, equalizer, overflow lines, sales lines, circulating lines, or drain lines).

Authorized representative (AR) has the same meaning as defined in 43 CFR 3160.0-5.

Business day means any day Monday through Friday, excluding Federal holidays.

Commingling and allocation approval (CAA) means a formal allocation agreement to combine production from two or more sources (leases, unit PAs, CAs, or non-Federal or non-Indian properties) before that product reaches an FMP.

Economically marginal property means a lease, unit PA, or CA that does not generate sufficient revenue above operating costs, such that a prudent operator would opt to plug a well or shut-in the lease, unit PA, or CA instead of making the investments needed to achieve non-commingled measurement of production from that lease, unit PA, or CA. A lease, unit PA, or CA may be regarded as economically marginal if the operator demonstrates that the expected revenue (net any associated operating costs) generated from crude oil or natural gas production volumes on that property is not sufficient to cover the nominal cost of the capital expenditures required to achieve measurement of non-commingled production of oil or gas from that property over a payout period of 18 months. A lease, unit PA, or CA can also be considered economically marginal if the operator demonstrates that its royalty net present value (RNPV), or the discounted value of the Federal or Indian royalties collected on revenue earned from crude oil or natural gas production on the lease, unit PA, or CA, over the expected life of the equipment that would need to be installed to achieve non-commingled measurement volumes, is less than the capital cost of purchasing and installing this equipment. Both the payout period and the RNPV are determined separately for each lease, unit PA, or CA oil or gas FMP. Additionally, oil FMPs are evaluated using estimated revenue (net of taxes and operating costs) from crude oil production, as defined in this section, while gas FMPs are evaluated using estimated revenue (net of taxes and operating costs) from natural gas production, as defined in this section.

Effectively sealed means the placement of a seal in such a manner that the sealed component cannot be accessed, moved, or altered without breaking the seal.

Free water means the measured volume of water that is present in a container and that is not in suspension in the contained liquid at observed temperature.

Land description means a location surveyed in accordance with the U.S. Department of the Interior's *Manual of Surveying Instructions* (2009), that includes the quarter-quarter section, section, township, range, and principal meridian, or other authorized survey designation acceptable to the AO, such as metes-and-bounds, or latitude and longitude.

Maximum ultimate economic recovery has the same meaning as defined in 43 CFR 3160.0-5.

Mishandling means failing to measure or account for removal of production from a facility.

Payout period means the time required, in months, for the cost of an investment in an oil or gas FMP for a specific lease, unit PA, or CA to be covered by the nominal revenue earned from crude oil production, for an oil FMP, or natural gas production, for a gas FMP, minus taxes, royalties, and any operating and variable costs. The payout period is determined separately for each oil or gas FMP for a given lease, unit PA, or CA.

Permanent measurement facility means all equipment constructed or installed and used on-site for 6 months or longer, for the purpose of determining the quantity, quality, or storage of production, and which meets the definition of FMP under § 3170.3.

Piping means a tubular system (e.g., metallic, plastic, fiberglass, or rubber) used to move fluids (liquids and gases).

Production phase means that event during which oil is delivered directly to or through production equipment to the storage facilities and includes all operations at the facility other than those defined by the sales phase.

Royalty Net Present Value (RNPV) means the net present value of all Federal or Indian royalties paid on revenue earned from crude oil production or natural gas production from an oil or gas FMP for a given lease, unit PA, or CA over the expected life of metering equipment that must be installed for that lease, unit PA, or CA to achieve non-commingled measurement.

Sales phase means that event during which oil is removed from storage facilities for sale at an FMP.

Seal means a uniquely numbered device that completely secures either a valve or those components of a measuring system that affect the quality or quantity of the oil being measured.

(b) As used in this subpart, the following additional acronyms

apply: BIA means the Bureau of Indian Affairs.

BMP means Best Management Practice.

§ 3173.2 Storage and sales facilities – seals.

(a) All lines entering or leaving any oil storage tank must have valves capable of being effectively sealed during the production and sales phases unless otherwise provided under this subpart. During the production phase, all appropriate valves that allow unmeasured production to be removed from storage must be effectively sealed in the closed position. During any other phase (sales, water drain, or hot oiling), and prior to taking the top tank gauge measurement, all appropriate valves that allow

unmeasured production to enter or leave the sales tank must be effectively sealed in the closed position (see Appendix A to subpart 3173). Each unsealed or ineffectively sealed appropriate valve is a separate violation.

(b) Valves or combinations of valves and tanks that provide access to the production before it is measured for sales are considered appropriate valves and are subject to the seal requirements of this subpart (see Appendix A to subpart 3173). If there is more than one valve on a line from a tank, the valve closest to the tank must be sealed. All appropriate valves must be in an operable condition and accurately reflect whether the valve is open or closed.

(c) The following are not considered appropriate valves and are not subject to the sealing requirements of this subpart:

(1) Valves on production equipment (e.g., separator, dehydrator, gun barrel, or wash tank);

(2) Valves on water tanks, provided that the possibility of access to production in the sales and storage tanks does not exist through a common circulating, drain, overflow, or equalizer system;

(3) Valves on tanks that contain oil that has been determined by the AO or AR to be waste or slop oil;

(4) Sample cock valves used on piping or tanks with a Nominal Pipe Size of 1 inch or less in diameter;

(5) Fill-line valves during shipment when a single tank with a nominal capacity of 500 barrels (bbls) or less is used for collecting marginal production of oil produced from a single well (i.e., production that is less than 3 bbls per day). All other seal requirements of this subpart apply;

(6) Gas line valves used on piping with a Nominal Pipe Size of 1 inch or less used as tank bottom “roll” lines, provided there is no access to the contents of the storage tank and the roll lines cannot be used as equalizer lines;

(7) Valves on tank heating systems that use a fluid other than the contents of the storage tank (i.e., steam, water, or glycol);

(8) Valves used on piping with a Nominal Pipe Size of 1 inch or less connected directly to the pump body or used on pump bleed off lines;

(9) Tank vent-line valves; and

(10) Sales, equalizer, or fill-line valves on systems where production may be removed only through approved oil metering systems (e.g., LACT or CMS). However, any valve that allows access for removing oil before it is measured through the metering system must be effectively sealed (see Appendix A to subpart 3173).

(d) Tampering with any appropriate valve is prohibited. Tampering with an appropriate valve may result in an assessment of civil penalties for knowingly or willfully preparing, maintaining, or submitting false, inaccurate, or misleading reports, records, or written information under 30 U.S.C. 1719(d)(1) and 43 CFR 3163.2(f)(1), or knowingly or willfully taking, removing, transporting, using, or diverting oil or gas from a lease site without valid legal authority under 30 U.S.C. 1719(d)(2) and 43 CFR 3163.2(f)(2), together with any other remedies provided by law.

§ 3173.3 Oil measurement system components - seals.

(a) Components used for quantity or quality determination of oil must be effectively sealed to indicate tampering, including, but not limited to, the following components of LACT meters (see § 3174.8(a)) and CMSs (see § 3174.9(e)) of this part):

- (1) Sample probe;
 - (2) Sampler volume control;
 - (3) All valves on lines entering or leaving the sample container, excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
 - (4) Meter assembly, including the counter head and meter head;
 - (5) Temperature averager;
 - (6) LACT meters or CMS;
 - (7) Back pressure valve pressure adjustment downstream of the meter;
 - (8) Any drain valves in the system;
 - (9) Manual-sampling valves (if so equipped);
 - (10) Valves on diverter lines larger than 1 inch in nominal diameter;
 - (11) Right-angle drive;
 - (12) Totalizer; and
 - (13) Prover connections.
- (b) Each missing or ineffectively sealed component is a separate violation.

§ 3173.4 Federal seals.

(a) In addition to any INC issued for a seal violation, the AO or AR may place one or more Federal seals on any appropriate valve, sealing device, or oil-metering-system component that does not comply with the requirements in §§ 3173.2 and 3173.3 of this subpart if the operator is not present, refuses to cooperate with the AO or AR, or is unable to correct the noncompliance.

(b) The placement of a Federal seal does not constitute compliance with the requirements of §§ 3173.2 and 3173.3 of this subpart.

(c)) A Federal seal may not be removed without the approval of the AO or AR.

§ 3173.5 Removing production from tanks for sale and transportation by truck.

(a) When a single truck load constitutes a completed sale, the driver must possess documentation containing the information required in § 3174.12 of this part.

(b) When multiple truckloads are involved in a sale and the oil measurement method is based on the difference between the opening and closing gauges, the driver of the last truck must possess the documentation containing the information required in § 3174.12 of this part. All other drivers involved in the sale must possess a trip log or manifest.

(c)) After the seals have been broken, the purchaser or transporter is responsible for the entire contents of the tank until it is resealed.

§ 3173.6 Water-draining operations.

When water is drained from a production storage tank, the operator, purchaser, or transporter, as appropriate, must document the following information:

- (a) Federal or Indian lease, unit PA, or CA number(s);
- (b) The tank location by land description;
- (c) The unique tank number and nominal capacity;
- (d) Date of the opening gauge;
- (e) Opening gauge (gauged manually or automatically), TOV, and free-water measurements, all to the nearest ½ inch;
- (f) Unique identifying number of each seal removed;
- (g) Closing gauge (gauged manually or automatically) and TOV measurement to the nearest ½ inch; and
- (h) Unique identifying number of each seal installed.

§ 3173.7 Hot oiling, clean-up, and completion operations.

(a) During hot oil, clean-up, or completion operations, or any other situation where the operator removes oil from storage, temporarily uses it for operational purposes, and then returns it to storage on the same lease, unit PA, or communitized area, the operator must document the following information:

- (1) Federal or Indian lease, unit PA, or CA number(s);
- (2) Tank location by land description;
- (3) Unique tank number and nominal capacity;
- (4) Date of the opening gauge;
- (5) Opening gauge measurement (gauged manually or automatically) to the nearest ½ inch;
- (6) Unique identifying number of each seal removed;
- (7) Closing gauge measurement (gauged manually or automatically) to the nearest ½ inch;
- (8) Unique identifying number of each seal installed;
- (9) How the oil was used; and
- (10) Where the oil was used (i.e., well or facility name and number).

(b) During hot oiling, line flushing, or completion operations or any other situation where the operator removes production from storage for use on a different lease, unit PA, or communitized area, the production is considered sold and must be measured in accordance with the applicable requirements of this subpart and reported as sold to ONRR on the OGOR under 30 CFR part 1210 subpart C for the period covering the production in question.

§ 3173.8 Report of theft or mishandling of production.

(a) No later than the next business day after discovery of an incident of apparent theft or mishandling of production, the operator, purchaser, or transporter must report the incident to the AO. All oral reports must be followed up with a written incident report within 10 business days of the oral report.

- (b) The incident report must include the following information:
- (1) Company name and name of the person reporting the incident;
 - (2) Lease, unit PA, or CA number, well or facility name and number, and FMP number, as appropriate;
 - (3) Land description of the facility location where the incident occurred;
 - (4) The estimated volume of production removed;
 - (5) The manner in which access was obtained to the production or how the mishandling occurred;
 - (6) The name of the person who discovered the incident;
 - (7) The date and time of the discovery of the incident; and
 - (8) Whether the incident was reported to local law enforcement agencies and/or company security.

§ 3173.9 Required recordkeeping for inventory and seal records.

(a) The operator must perform an end-of-month inventory (gauged manually or automatically) that records: TOV in storage (measured to the nearest ½ inch) subtracting free water, the volume not corrected for temperature/S&W, and the volume as reported to ONRR on the OGOR;

(1) The end-of-month inventory must be completed within +/- 3 days of the last day of the calendar month; or

(2) The end of month inventory must be a calculated “end of month” inventory based on daily production that takes place between two measured inventories that are not more than 31, nor fewer than 20, days apart. The calculated monthly inventory is determined based on the following equation:

$$\{[(X + Y - W) / Z1] * Z2\} + X = A,$$

Where:

A = calculated end of month inventory;

W = first inventory measurement;

X = second inventory measurement;

Y = gross sales volume between the first and second inventory;

Z1 = number of actual days produced between the first and second inventory; and

Z2 = number of actual days produced between the second inventory and end of calendar month for which the OGOR report is due.

For example: If the first inventory measurement performed on January 12 is 125 bbls, the second inventory measurement performed on February 10 is 150 bbls, the gross sales volume between the first and second inventory is 198 bbls, and February is the calendar month for which the report is due. For purposes of this example, we assume February had 28 days and that the well was non-producing for two of those days.

$\{[(150 \text{ bbls} + 198 \text{ bbls} - 125 \text{ bbls}) / 29 \text{ days}] * 16 \text{ days}\} + 150 \text{ bbls} = 273 \text{ bbls}$
for the February end-of-month inventory.

(b) For each seal, the operator must maintain a record that includes:

- (1) The unique identifying number of each seal and the valve or meter component on which the seal is or was used;
- (2) The date of installation or removal of each seal;
- (3) For valves, the position (open or closed) in which it was sealed; and
- (4) The reason the seal was removed.

§ 3173.10 Form 3160-5, Sundry Notices and Reports on Wells.

(a) The operator must submit a Form 3160-5, Sundry Notices and Reports on Wells (Sundry Notice) for the following:

- (1) Site facility diagrams (see § 3173.11 of this subpart);
- (2) Request for an FMP number (see § 3173.12 of this subpart);
- (3) Request for FMP amendments (see § 3173.13(b) of this subpart);
- (4) Requests for approval of off-lease measurement (see § 3173.23 of this subpart);
- (5) Request to amend an approval of off-lease measurement (see § 3173.23(k) of this subpart);
- (6) Requests for approval of CAAs (see § 3173.15 of this subpart); and
- (7) Request to modify a CAA (see § 3173.18 of this subpart).

(b) The operator must submit all Sundry Notices electronically to the BLM office having jurisdiction over the lease, unit, or CA using WIS, unless the submitter:

- (1) Is a small business, as defined by the U.S. Small Business Administration; and
- (2) Does not have access to the Internet.

§ 3173.11 Site facility diagram.

(a) A site facility diagram is required for all facilities.

(b) Except for the requirement to submit a Form 3160-5, Sundry Notice, with the site facility diagram, no format is prescribed for site facility diagrams. The diagram should be formatted to fit on an 8½ x 11 sheet of paper, if possible, and must be legible and comprehensible to an individual with an ordinary working knowledge of oil field operations (see Appendix A to subpart 3173). If more than one page is required, each page must be numbered (in the format “N of X pages”).

(c) The diagram must:

(1) Reflect the position of the production and water recovery equipment, piping for oil, gas, and water, and metering or other measuring systems in relation to each other, but need not be to scale;

(2) Commencing with the header, identify all of the equipment, including, but not limited to, the header, wellhead, piping, tanks, and metering systems located on the site,

and include the appropriate valves and any other equipment used in the handling, conditioning, or disposal of production and water, and indicate the direction of flow;

(3) Identify by API number the wells flowing into headers;

(4) If another operator operates a co-located facility, depict the co-located

facility(ies) on the diagram or list them as an attachment and identify them by company name, facility name(s), lease, unit PA, or CA number(s), and FMP number(s);

(5) Indicate which valve(s) must be sealed and in what position during the production and sales phases and during the conduct of other production activities (e.g., circulating tanks or drawing off water), which may be shown by an attachment, if necessary;

(6) When describing co-located facilities operated by one operator, include a skeleton diagram of the co-located facility(ies), showing equipment only. For storage facilities common to co-located facilities operated by one operator, one diagram is sufficient;

(7) Clearly identify the lease, unit PA, or CA to which the diagram applies, the land description of the facility, and the name of the company submitting the diagram, with co-located facilities being identified for each lease, unit PA, or CA;

(8) Clearly identify, on the diagram or as an attachment, all meters and measurement equipment. Specifically identify all approved and assigned FMPs; and

(9) If the operator claims royalty-free use, clearly identify the equipment for which the operator claims royalty-free use. The operator must either:

(i) For each engine, motor, or major component (e.g., compressor, separator, dehydrator, heater-treater, or tank heater) powered by production from the lease, unit PA, or CA, state the volume (oil or gas) consumed (per day or per month) and how the volume is determined; or

(ii) Measure the volume used, by meter or tank gauge.

(d) At facilities for which the BLM will assign an FMP number under § 3173.12, the operator must submit a new site facility diagram as follows:

(1) For facilities that become operational January 17, 2017, within 30 days after the BLM assigns an FMP; or

(2) For a facility that is in service on or before January 17, 2017 and that has a site facility diagram on file with the BLM that meets the minimum requirements of Onshore Oil and Gas Order 3, Site Security, an amended site facility diagram meeting the requirements of this section is not due until 30 days after the existing facility is modified, a non-Federal facility located on a Federal lease or federally approved unit or communitized area is constructed or modified, or there is a change in operator.

(e) At facilities for which an FMP number is not required under § 3173.12 (e.g., facilities that dispose of produced water), the operator must submit a new site facility diagram as follows:

(1) For new facilities in service after January 17, 2017, the new site facility diagram must be submitted within 30 days after the facility becomes operational; or

(2) For a facility that is in service on or before January 17, 2017, and that has a site facility diagram on file with the BLM that meets the minimum requirements of Onshore Oil and Gas Order 3, Site Security, an amended site facility diagram meeting the requirements of this section is not due until 30 days after the existing facility is modified, a non-Federal facility located on a Federal lease or federally approved unit or communitized area is constructed or modified, or there is a change in operator.

(f) After a site facility diagram has been submitted that complies with the requirements of this part, the operator has an ongoing obligation to update and amend

the diagram within 30 days after such facility is modified, a non-Federal facility located on a Federal lease or federally approved unit or communitized area is constructed or modified, or there is a change in operator.

§ 3173.12 Applying for a facility measurement point.

(a)(1) Unless otherwise approved, the FMP(s) for all Federal and Indian leases, unit PAs or CAs must be located within the boundaries of the lease, unit, or communitized area from which the production originated and must measure only production from that lease, unit PA, or CA.

(2) Off-lease measurement or commingling and allocation of Federal or Indian production requires prior approval (see 43 CFR 3162.7-2, 3162.7-3, 3173.15, 3173.16, 173.24, and 3173.25).

(b) The BLM will not approve as an FMP a gas processing plant tailgate meter located off the lease, unit, or communitized area.

(c) The operator must submit separate applications for approval of an FMP that measures oil produced from a lease, unit PA, or CA, or under a CAA that complies with the requirements of this subpart, and an FMP that measures gas produced from the same lease, unit PA, or CA, or under a CAA that complies with the requirements of this subpart. This requirement applies even if the measurement equipment or facilities are at the same location.

(d) For a permanent measurement facility that comes into service after January 17, 2017, the operator must apply for approval of the FMP before any production leaves the permanent measurement facility. This requirement does not apply to temporary measurement equipment used during well testing operations. After timely submission and prior to approval of an FMP request, an operator must use the lease, unit PA, or CA number for reporting production to ONRR, until the BLM assigns an FMP number, at which point the operator must use the FMP number for all reporting to ONRR as set forth in § 3173.13 of this subpart.

(e) For a permanent measurement facility in service on or before January 17, 2017, the operator must apply for BLM approval of an FMP within the time prescribed in this paragraph, based on the production level of any one of the leases, unit PAs, or CAs, whether or not they are part of a CAA. The deadline to apply for an FMP approval applies to both oil and gas measurement facilities measuring production from that lease, unit PA, or CA.

(1) For a stand-alone lease, unit PA, or CA that produced 10,000 Mcf or more of gas per month or 100 bbls or more of oil per month, by January 17, 2018.

(2) For a stand-alone lease, unit PA, or CA that produced 1,500 Mcf or more, but less than 10,000 Mcf of gas per month, or 10 bbls or more, but less than 100 bbls of oil per month, by January 17, 2019.

(3) For a stand-alone lease, unit PA, or CA that produced less than 1,500 Mcf of gas per month or less than 10 bbls of oil per month, January 17, 2020.

(4) For a stand-alone lease, unit PA or CA that has not produced for a year or more before January 17, 2017, the operator must apply for an FMP prior to the resumption of production.

(5) The production levels identified in paragraphs (e)(1) through (e)(3) of this

section should be calculated using the average production of oil or gas over the 12 months preceding the effective date of this section or over the period the lease, unit PA, or CA has been in production, whichever is shorter.

(6) If the operator of any facility covered by this section applies for an FMP approval by the deadline in this paragraph, the operator may continue using the lease, unit PA, or CA number for reporting production to ONRR, until the BLM's assigns an FMP number, at which point the operator must use the FMP number for all reporting to ONRR as set forth in § 3173.13 of this subpart.

(7) If the operator fails to apply for an FMP approval by the deadline in this paragraph, the operator will be subject to an INC and may also be subject to an assessment of a civil penalty under 43 CFR subpart 3163, together with any other remedy available under applicable law or regulation.

(f) All requests for FMP approval must include the following:

(1) A complete Sundry Notice requesting approval of each FMP;

(2) The applicable Measurement Type Code specified in WIS;

(3) Information about the equipment used for oil and gas measurement, including, for:

(i) "Gas measurement," specify operator/purchaser/transporter unique station number, primary element (meter tube) size or serial number, and type of secondary device (mechanical or electronic);

(ii) "Oil measurement by tank gauge," specify oil tank number or tank serial number and size in barrels or gallons for all tanks associated with measurement at an FMP; and

(iii) "Oil measurement by LACT or CMS," specify whether the equipment is LACT or CMS and the associated oil tank number or tank serial number and size in barrels or gallons (there may be more than one tank associated with an FMP);

(4) Where production from more than one well will flow to the requested FMP, list the API well numbers associated with the FMP; and

(5) FMP location by land description.

(g) Request for approval of an FMP may be submitted concurrently with separate requests for off-lease measurement and/or CAA.

§ 3173.13 Requirements for approved facility measurement points.

(a) For an existing facility in service on or before January 17, 2017, an operator must start using an FMP number for reporting production to ONRR on its OGOR for the fourth production month after the BLM assigns the FMP number(s), and every month thereafter. (For example, for a facility that is assigned an FMP number on January 15, 2016, the effective date of the FMP is the May production report.) For a new facility in service after January 17, 2017, an operator must start using an FMP number for reporting production to ONRR on its OGOR for the first production month after the BLM assigns the FMP number(s), and every month thereafter. (For example, for a facility that is assigned an FMP number on January 15, 2016, the effective date of the FMP is the February production report.)

(b)(1) The operator must file a Sundry Notice that describes any changes or modifications made to the FMP within 30 days after the change. This requirement does not apply to temporary modifications (e.g., for maintenance purposes). These

include any changes and modifications to the information listed on an application submitted under §3173.12 of this subpart.

(2) The description must include details such as the primary element, secondary element, LACT/CMS meter, tank number(s), and wells or facilities using the FMP.

(3) The Sundry Notice must specify what was changed and the effective date, and include, if appropriate, an amended site facility diagram (see § 3173.11 of this subpart).

§ 3173.14 Conditions for commingling and allocation approval (surface and downhole).

(a) Subject to the exceptions provided in paragraph (b) of this section, the BLM may grant a CAA only if the proposed allocation method used for any such commingled measurement does not have the potential to affect the determination of the total volume or quality of production on which royalty owed is determined for all the Federal or Indian leases, unit PAs, or CAs which are proposed for commingling, and only if the following criteria are met:

(1) The proposed commingling includes production from more than one:

(i) Federal lease, unit PA, or CA, where each lease, unit PA, or CA proposed for commingling has 100 percent Federal mineral interest, the same fixed royalty rate and, and the same revenue distribution;

(ii) Indian tribal lease, unit PA, or CA, where each lease, unit PA, or CA proposed for commingling is wholly owned by the same tribe and has the same fixed royalty rate;

(iii) Federal unit PA or CA where each unit PA or CA proposed for commingling has the same proportion of Federal interest, and which interest is subject to the same fixed royalty rate and revenue distribution. (For example, the BLM could approve a commingling request under this paragraph where an operator proposes to commingle two Federal CAs of mixed ownership and both CAs are 50 percent Federal/50 percent private, so long as the Federal interests have the same royalty rates and royalty distributions.); or

(iv) Indian unit PA or CA where each unit PA or CA proposed for commingling has the same proportion of Indian interests, and which interest is held by the same tribe and has the same fixed royalty rate; and

(2) The operator or operators provide a methodology acceptable to BLM for allocation among the properties from which production is to be commingled (including a method for allocating produced water), with a signed agreement if there is more than one operator;

(3) For each of the leases, unit PAs, or CAs proposed for inclusion in the CAA, the applicant demonstrates to the AO that a lease, unit PA, or CA proposed for inclusion is producing in paying quantities (or, in the case of Federal leases, capable of production in paying quantities) pending approval of the CAA; and

(4) The FMP(s) for the proposed CAA measure production originating only from the leases, unit PAs, or CAs in the CAA.

(b) The BLM may also approve a CAA in instances where the proposed

commingling of production involves production from Federal or Indian leases, unit PAs, or CAs that do not meet the criteria of subparagraph (a)(1) (e.g., the commingling of leases, unit PAs, or CAs with different royalty rates or different distributions of revenue, or where the commingling involves multiple mineral ownerships). In order to be approved, a CAA under this subparagraph must meet the requirements of paragraphs (a)(2) through (a)(4) of this section and at least one of the following conditions:

(1) The Federal or Indian lease, unit PA, or CA meets the definition of an economically marginal property. However, if the BLM determines that a Federal or Indian lease, unit PA, or CA included in a CAA ceases to be an economically marginal property, then this condition is no longer met;

(2) The average monthly production over the preceding 12 months for each Federal or Indian lease, unit PA, or CA proposed for the CAA on an individual basis is less than 1,000 Mcf of gas per month, or 100 bbls of oil per month;

(3) A CAA that includes Indian leases, unit PAs, or CAs has been authorized under tribal law or otherwise approved by a tribe;

(4) The CAA covers the downhole commingling of production from multiple formations that are covered by separate leases, unit PAs, or CAs, where the BLM has determined that the proposed commingling from those formations is an acceptable practice for the purpose of achieving maximum ultimate economic recovery and resource conservation; or

(5) There are overriding considerations that indicate the BLM should approve a commingling application in the public interest notwithstanding potential negative royalty impacts from the allocation method. Such considerations could include topographic or other environmental considerations that make non-commingled measurement physically impractical or undesirable, in view of where additional measurement and related equipment necessary to achieve non-commingled measurement would have to be located.

§ 3173.15 Applying for a commingling and allocation approval.

To apply for a CAA, the operator(s) must submit the following, if applicable, to the BLM office having jurisdiction over the leases, unit PAs, or CAs from which production is proposed to be commingled:

(a) A completed Sundry Notice for approval of commingling and allocation (if off-lease measurement is a feature of the commingling and allocation proposal, then a separate Sundry Notice under § 3173.23 is not necessary as long as the information required under § 3173.23 (b) through (e) and, where applicable, § 3173.23 (f) through (i) is included as part of the request for approval of commingling and allocation);

(b) A completed Sundry Notice for approval of off-lease measurement under § 3173.23 of this subpart, if any of the proposed FMPs are outside the boundaries of any of the leases, units, or CAs from which production would be commingled (which may be included in the same Sundry Notice as the request for approval of commingling and allocation), except as provided in paragraph (a) of this section;

(c) A proposed allocation agreement, including an allocation methodology (including allocation of produced water), with an example of how the methodology

is applied, signed by each operator of each of the leases, unit PAs, or CAs from which production would be included in the CAA;

(d) A list of all Federal or Indian lease, unit PA, or CA numbers in the proposed CAA, specifying the type of production (i.e., oil, gas, or both) for which commingling is requested;

(e)) A topographic map or maps of appropriate scale showing the following:

(1) The boundaries of all the leases, units, unit PAs, or communitized areas whose production is proposed to be commingled; and

(2) The location of existing or planned facilities and the relative location of all wellheads (including the API number) and piping included in the CAA, and existing FMPs or FMPs proposed to be installed to the extent known or anticipated;

(f)) A surface use plan of operations (which may be included in the same Sundry Notice as the request for approval of commingling and allocation) if new surface disturbance is proposed for the FMP and its associated facilities are located on BLM-managed land within the boundaries of the lease, units, and communitized areas from which production would be commingled;

(g) A right-of-way grant application (Standard Form 299), filed under 43 CFR part 2880, if the proposed FMP is on a pipeline, or under 43 CFR part 2800, if the proposed FMP is a meter or storage tank. This requirement applies only when new surface disturbance is proposed for the FMP, and its associated facilities are located on BLM-managed land outside any of the leases, units, or communitized areas whose production would be commingled;

(h) Written approval from the appropriate surface-management agency, if new surface disturbance is proposed for the FMP and its associated facilities are located on Federal land managed by an agency other than the BLM;

(i) A right-of-way grant application for the proposed FMP, filed under 25 CFR part 169, with the appropriate BIA office, if any of the proposed surface facilities are on Indian land outside the lease, unit, or communitized area from which the production would be commingled;

(j) Documentation demonstrating that each of the leases, unit PAs, or CAs proposed for inclusion in the CAA is producing in paying quantities (or, in the case of Federal leases, is capable of production in paying quantities) pending approval of the CAA; and

(k) All gas analyses, including Btu content (if the CAA request includes gas) and all oil gravities (if the CAA request includes oil) for previous periods of production from the leases, units, unit PAs, or communitized areas proposed for inclusion in the CAA, up to 6 years before the date of the application for approval of the CAA. Gas analysis and oil gravity data is not needed if the CAA falls under § 3173.14(a)(1).

§ 3173.16 Existing commingling and allocation approvals.

Upon receipt of an operator's request for assignment of an FMP number to a facility associated with a CAA existing on January 17, 2017, the AO will review the existing CAA and take the following action:

(a) The AO will grandfather the existing CAA and associated off-lease measurement, where applicable, if the existing CAA meets one of the following

conditions:

(1) The existing CAA involves downhole commingling that includes Federal or Indian leases, unit PAs, or CAs; or

(2) The existing CAA is for surface commingling and the average production rate over the previous 12 months for each Federal or Indian lease, unit PA, and CA included in the CAA is:

(i) Less than 1,000 Mcf per month for gas; or

(ii) Less than 100 bbls per day for oil.

(b) If the existing CAA does not meet the conditions of paragraphs (a)(1) or (a)(2) of this section, the AO will review the CAA for consistency with the minimum standards and requirements for a CAA under § 3173.14 of this subpart.

(1) The AO will notify the operator in writing of any inconsistencies or deficiencies with an existing CAA. The operator must correct any inconsistencies or deficiencies that the AO identifies, provide the additional information that the AO has requested, or request an extension of time from the AO, within 20 business days after receipt of the AO's notice. When the AO is satisfied that the operator has corrected any inconsistencies or deficiencies, the AO will terminate the existing CAA and grant a new CAA based on the operator's corrections.

(2) The AO may terminate the existing CAA and grant a new CAA with new or amended COAs to make the approval consistent with the requirements under § 3173.14 of this subpart in connection with approving the requested FMP. If the operator appeals any COAs of the new CAA, the existing CAA approval will continue in effect during the pendency of the appeal.

(3) If the existing CAA does not meet the standards and requirements of § 3173.14 of this subpart and the operator does not correct the deficiencies, the AO may terminate the existing CAA under § 3173.20 of this subpart and deny the request for an FMP number for the facility associated with the existing CAA.

(c) If the AO grants a new CAA to replace an existing CAA under paragraph (b) of this section, the new CAA is effective on the first day of the month following its approval. Any new allocation percentages resulting from the new CAA will apply from the effective date of the CAA forward.

§ 3173.17 Relationship of a commingling and allocation approval to royalty-free use of production.

A CAA does not constitute approval of off-lease royalty-free use of production as fuel in facilities located at an FMP approved under the CAA.

§ 3173.18 Modification of a commingling and allocation approval.

(a) A CAA must be modified when there is:

(1) A modification to the allocation agreement;

(2) Inclusion of additional leases, unit PAs, or CAs are proposed in the CAA; or

(3) Termination of or permanent production cessation from any of the leases, unit PAs, or CAs within the CAA.

(b) To request a modification of a CAA, all operators must submit to the AO:

- (1) A completed Sundry Notice describing the modification requested;
 - (2) A new allocation methodology, including an allocation methodology which includes allocation of produced water and an example of how the methodology is applied, if appropriate; and
 - (3) Certification by each operator in the CAA that it agrees to the CAA modification.
- (c) A change in operator does not trigger the need to modify a CAA.

§ 3173.19 Effective date of a commingling and allocation approval.

- (a) If the BLM approves a CAA, the effective date of the CAA is the first day of the month following first production through the FMPs for the CAA.
- (b) If the BLM approves a modification, the effective date is the first day of the month following approval of the modification.
- (c)) A CAA does not modify any of the terms of the leases, units, or CAs covered by the CAA.

§ 3173.20 Terminating a commingling and allocation approval.

- (a) The AO may terminate a CAA for any reason, including, but not limited to, the following:
 - (1) Changes in technology, regulation, or BLM policy;
 - (2) Operator non-compliance with the terms or COAs of the CAA or this subpart;or
 - (3) The AO determines that a lease, unit, or CA subject to the CAA has terminated, or a unit PA subject to the CAA has ceased production.
- (b) If only one lease, unit PA, or CA remains subject to the CAA, the CAA terminates automatically.
- (c) An operator may terminate its participation in a CAA by submitting a Sundry Notice to the BLM. The Sundry Notice must identify the FMP(s) for the lease(s), unit PA(s), or CA(s) previously subject to the CAA. Termination by one operator does not mean the CAA terminates as to all other participating operators, so long as one of the other provisions of this subpart is met and the remaining operators submit a Sundry Notice requesting a new CAA as outlined in paragraph (e) of this section.
- (d) The AO will notify in writing all operators who are a party to the CAA of the effective date of the termination and any inconsistencies or deficiencies with their CAA approval that serve as the reason(s) for termination. The operator must correct any inconsistencies or deficiencies that the AO identifies, provide the additional information that the AO has requested, or request an extension of time from the AO, within 20 business days after receipt of the BLM's notice, or the CAA is terminated.
- (e) If a CAA is terminated, each lease, unit PA, or CA that was included in the CAA may require a new FMP number(s) or a new CAA. Operators will have 30 days to apply for a new FMP number (§ 3173.12) or CAA (§ 3173.15), if applicable. The existing FMP number may be used for production reporting until a new FMP number is assigned or CAA is approved.

§ 3173.21 Combining production downhole in certain circumstances.

(a)(1) Combining production from a single well drilled into different hydrocarbon pools or geologic formations (e.g., a directional well) underlying separate adjacent properties (whether Federal, Indian, State, or private), where none of the hydrocarbon pools or geologic formations underlie or are common to more than one of the respective properties, constitutes commingling for purposes of §§ 3173.14 through 3173.20.

(2) If any of the hydrocarbon pools or geologic formations underlie or are common to more than one of the properties, the operator must establish a unit PA (see 43 CFR part 3180) or CA (see 43 CFR 3105.2-1 – 3105.2-3), as applicable, rather than applying for a CAA.

(b) Combining production downhole from different geologic formations on the same lease, unit PA, or CA in a single well requires approval of the AO (see 43 CFR 3162.3- 2), but it is not considered commingling for production accounting purposes.

§ 3173.22 Requirements for off-lease measurement.

The BLM will consider granting a request for off-lease measurement if the request:

- (a) Involves only production from a single lease, unit PA, CA, or CAA;
- (b) Provides for accurate production accountability;
- (c) Is in the public interest (considering factors such as BMPs, topographic and environmental conditions that make on-lease measurement physically impractical, and maximum ultimate economic recovery); and
- (d) Occurs at an approved FMP. A request for approval of an FMP (see § 3173.12 of this subpart) may be filed concurrently with the request for off-lease measurement.

§ 3173.23 Applying for off-lease measurement.

To apply for approval of off-lease measurement, the operator must submit the following to the BLM office having jurisdiction over the leases, units, or communitized areas:

- (a) A completed Sundry Notice;
- (b) Justification for off-lease measurement (considering factors such as BMPs, topographic and environmental issues, and maximum ultimate economic recovery);
- (c)) A topographic map or maps of appropriate scale showing the following:
 - (1) The boundary of the lease, unit, unit PA, or communitized area from which the production originates; and
 - (2) The location of existing or planned facilities and the relative location of all wellheads (including the API number for each well) and piping included in the off-lease measurement proposal, and existing FMPs or FMPs proposed to be installed to the extent known or anticipated;
- (d) The surface ownership of all land on which equipment is, or is proposed to be, located;

(e) If any of the proposed off-lease measurement facilities are located on non-federally owned surface, a written concurrence signed by the owner(s) of the surface and the owner(s) of the measurement facilities, including each owner's name, address, and telephone number, granting the BLM unrestricted access to the off-lease measurement facility and the surface on which it is located, for the purpose of inspecting any production, measurement, water handling, or transportation equipment located on the non-Federal surface up to and including the FMP, and for otherwise verifying production accountability. If the ownership of the non-Federal surface or of the measurement facility changes, the operator must obtain and provide to the AO the written concurrence required under this paragraph from the new owner(s) within 30 days of the change in ownership;

(f) A right-of-way grant application (Standard Form 299), filed under 43 CFR part 2880, if the proposed off-lease FMP is on a pipeline, or under 43 CFR part 2800, if the proposed off-lease FMP is a meter or storage tank. This requirement applies only when new surface disturbance is proposed for the FMP and its associated facilities are located on BLM-managed land;

(g) A right-of-way grant application, filed under 25 CFR part 169 with the appropriate BIA office, if any of the proposed surface facilities are on Indian land outside the lease, unit, or communitized area from which the production originated;

(h) Written approval from the appropriate surface-management agency, if new surface disturbance is proposed for the FMP and its associated facilities are located on Federal land managed by an agency other than the BLM;

(i) An application for approval of off-lease royalty-free use (if required under applicable rules), if the operator proposes to use production from the lease, unit, or CA as fuel at the off-lease measurement facility without payment of royalty;

(j) A statement that indicates whether the proposal includes all, or only a portion of, the production from the lease, unit, or CA. (For example, gas, but not oil, could be proposed for off-lease measurement.) If the proposal includes only a portion of the production, identify the FMP(s) where the remainder of the production from the lease, unit, or CA is measured or is proposed to be measured; and

(k) If the operator is applying for an amendment of an existing approval of off-lease measurement, the operator must submit a completed Sundry Notice required under paragraph (a) of this section, and information required under paragraphs (b) through (j) of this section to the extent the information previously submitted has changed.

§ 3173.24 Effective date of an off-lease measurement approval.

If the BLM approves off-lease measurement, the approval is effective on the date that the approval is issued, unless the approval specifies a different effective date.

§ 3173.25 Existing approved off-lease measurement.

(a) Upon receipt of an operator's request for assignment of an FMP number to a facility associated with an off-lease measurement approval existing on January 17, 2017, the AO will review the existing approved off-lease measurement for consistency with the minimum standards and requirements for an off-lease measurement approval under § 3173.22 of this subpart. The AO will notify the

operator in writing of any inconsistencies or deficiencies.

(b) The operator must correct any inconsistencies or deficiencies that the AO identifies, provide any additional information the AO requests, or request an extension of time from the AO, within 20 business days after receipt of the AO's notice. The extension request must explain the factors that will prevent the operator from complying within 20 days and provide a timeframe under which the operator can comply.

(c) The AO may terminate the existing off-lease measurement approval and grant a new off-lease measurement approval with new or amended COAs to make the approval consistent with the requirements for off-lease measurement under § 3173.22 of this subpart in connection with approving the requested FMP. If the operator appeals the new off-lease measurement approval, the existing off-lease measurement approval will continue in effect during the pendency of the appeal.

(d) If the existing off-lease measurement approval does not meet the standards and requirements of § 3173.22 of this subpart and the operator does not correct the deficiencies, the AO may terminate the existing off-lease measurement approval under §3173.27 of this subpart and deny the request for an FMP number for the facility associated with the existing off-lease measurement approval.

(e) If the existing off-lease measurement approval under this section is consistent with the requirements under § 3173.22, then that existing off-lease measurement is grandfathered and will be part of its FMP approval.

(f) If the BLM grants a new off-lease measurement approval to replace an existing off- lease measurement approval, the new approval is effective on the first day of the month following its approval.

§ 3173.26 Relationship of off-lease measurement approval to royalty-free use of production.

Approval of off-lease measurement does not constitute approval of off-lease royalty- free use of production as fuel in facilities located at an FMP approved under the off-lease measurement approval.

§ 3173.27 Termination of off-lease measurement approval.

(a) The BLM may terminate off-lease measurement approval for any reason, including, but not limited to, the following:

- (1) Changes in technology, regulation, or BLM policy; or
- (2) Operator non-compliance with the terms or conditions of approval of the off-lease measurement approval or §§ 3173.22 through 3173.26 of this subpart.

(b) The BLM will notify the operator in writing of the effective date of the termination and any inconsistencies or deficiencies with its off-lease measurement approval that serve as the reason(s) for termination. The operator must correct any inconsistencies or deficiencies that the BLM identifies, provide any additional information the AO requests, or request an extension of time from the AO within 20 business days after receipt of the BLM's notice, or the off lease measurement approval terminates on the effective date.

(c) The operator may terminate the off-lease measurement by submitting a Sundry Notice to the BLM. The Sundry Notice must identify the new FMP(s) for the lease(s), unit(s), or CA(s) previously subject to the off-lease measurement approval.

(d) If off-lease measurement is terminated, each lease, unit PA, or CA that was subject to the off-lease measurement approval may require a new FMP number(s) or a new off- lease measurement approval. Operators will have 30 days to apply for a new FMP number or off-lease measurement approval, whichever is applicable. The existing FMP number may be used for production reporting until a new FMP number is assigned or off- lease measurement is approved.

§ 3173.28 Instances not constituting off-lease measurement, for which no approval is required.

(a) If the approved FMP is located on the well pad of a directionally or horizontally drilled well that produces oil and gas from a lease, unit, or communitized area on which the well pad is not located, measurement at the FMP does not constitute off-lease measurement. However, if the FMP is located off of the well pad, regardless of distance, measurement at the FMP constitutes off-lease measurement, and BLM approval is required under §§ 3173.22 through 3173.26 of this subpart.

(b) If a lease, unit, or CA consists of more than one separate tract whose boundaries are not contiguous (e.g., a single lease comprises two or more separate tracts), measurement of production at an FMP located on one of the tracts is not considered to be off-lease measurement if:

(1) The production is moved from one tract within the same lease, unit, or communitized area to another area of the lease, unit, or communitized area on which the FMP is located; and

(2) Production is not diverted during the movement between the tracts before the FMP, except for production used royalty free.

§ 3173.29 Immediate assessments for certain violations.

Certain instances of noncompliance warrant the imposition of immediate assessments upon discovery, as prescribed in the following table. Imposition of these assessments does not preclude other appropriate enforcement actions:

Table 1 to § 3173.29 - Violations Subject to an Immediate Assessment

Violations Subject to an Immediate Assessment	
Violation:	Assessment amount per violation (\$)

1. An appropriate valve on an oil storage tank was not sealed, as required by § 3173.2 of this subpart.	\$1,000
2. An appropriate valve or component on an oil metering system was not sealed, as required by §3173.3 of this subpart.	\$1,000
3. A Federal seal is removed without prior approval of the AO or AR, as required by §3173.4 of this subpart.	\$1,000
4. Oil was not properly measured before removal from storage for use on a different lease, unit, or CA, as required by § 3173.7(b) of this subpart.	\$1,000
5. An FMP was bypassed, in violation of §3170.4 of this part.	\$1,000
6. Theft or mishandling of production was not reported to the BLM, as required by § 3173.8 of this subpart.	\$1,000
7. Records necessary to determine quantity and quality of production were not retained, as required by § 3170.7 of this subpart	\$1,000
8. FMP application was not submitted, as required by §3173.12 of this subpart.	\$1,000
9. (i) For facilities that begin operation after January 17, 2017, BLM approval for off-lease measurement was not obtained before removing production, as required by § 3173.23 of this subpart. (ii) Facilities that were in operation on or before January 17, 2017, are subject to an assessment if they do not have an existing BLM approval for off-lease measurement.	\$1,000
10. (i) For facilities that begin operation January 17, 2017, BLM approval for surface commingling was not obtained before removing production, as required by § 3173.15 of this subpart. (ii) Facilities that were in operation on or before January 17, 2017, are subject to an assessment if they do not have an existing BLM approval for surface commingling.	\$1,000
11. (i) For facilities that begin operation January 17, 2017, BLM approval for downhole commingling was not obtained before removing production, as required by § 3173.15 of this subpart. (ii) Facilities that were in operation on or before January 17, 2017, are subject to an assessment if they do not have an existing BLM approval for downhole commingling.	\$1,000

APPENDIX A to Subpart 3173
Examples of Site Facility Diagrams

I. Diagrams

1. Site Facility Diagrams and Sealing of Valve Introduction
2. Diagrams

Diagrams	Description
I-A	Gas well without separation equipment
I-B	Gas well with separation equipment
I-C	Single operator with co-located facilities single oil tank, gas, and water storage
I-D	Oil sales with multiple oil tanks, gas, and water storage
I-E	Co-located facilities with multiple operators, oil sales by liquid meter (Lease Automatic Custody Transfer or Coriolis Measurement System), gas, and water storage
I-F	On-lease gas plant, with oil sales by liquid meter, Liquefied Petroleum Gas (LPG)/Natural Gas Liquids (NGL) sales by liquid meter, inlet gas, tailgate gas, flared or vented and plant process gas used.
I-G	Enhanced recovery water injection or other water disposal facility.
I-H	Pod Facility
I-I	On-lease with gas measurement after the Joule– Thomson Plant (JT-Skid), oil sales by liquid meter, Liquefied Petroleum Gas (LPG)/Natural Gas Liquids (NGL) sales by liquid meter.
I-J	On-lease with gas measurement before the Joule– Thomson Plant (JT-Skid) and oil sales by liquid meter. Note: No FMP number required for Liquefied Petroleum Gas (LPG)/Natural Gas Liquids (NGL) liquid meter.

Note: No FMP number required for Liquefied Petroleum Gas (LPG)/Natural Gas Liquids (NGL) liquids meter.

1. *Site Facility Diagrams and Sealing of Valves Introduction*

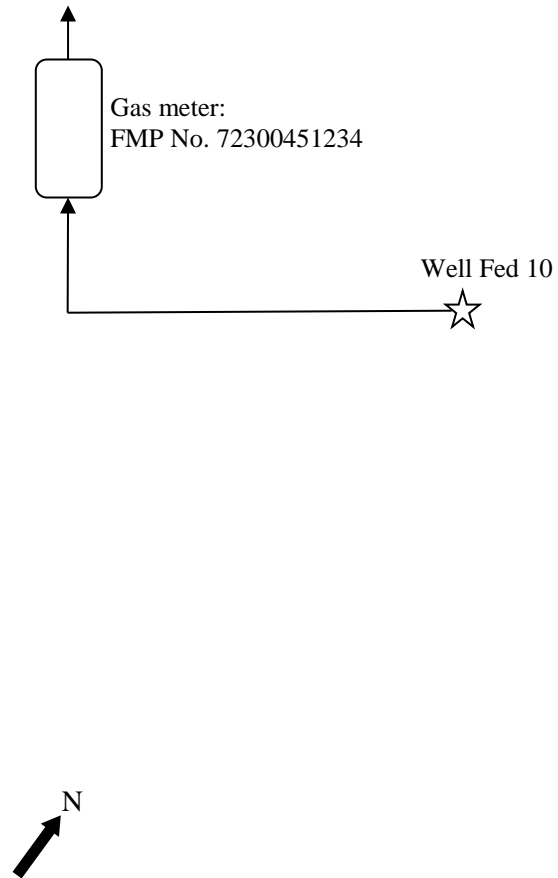
Introduction

Appendix A is provided not as a requirement but solely as an example to aid operators, purchasers and transporters in determining what valves are considered "appropriate valves" subject to the seal requirements of this rule, and to aid in the preparation of facility diagrams. It is impossible to include every type of equipment that could be used or situation that could occur in production activities. In making the determination of what is an "appropriate valve," the entire facility must be considered as a whole, including the facility size, the equipment type, and the on-going activities at the facility.

I-A

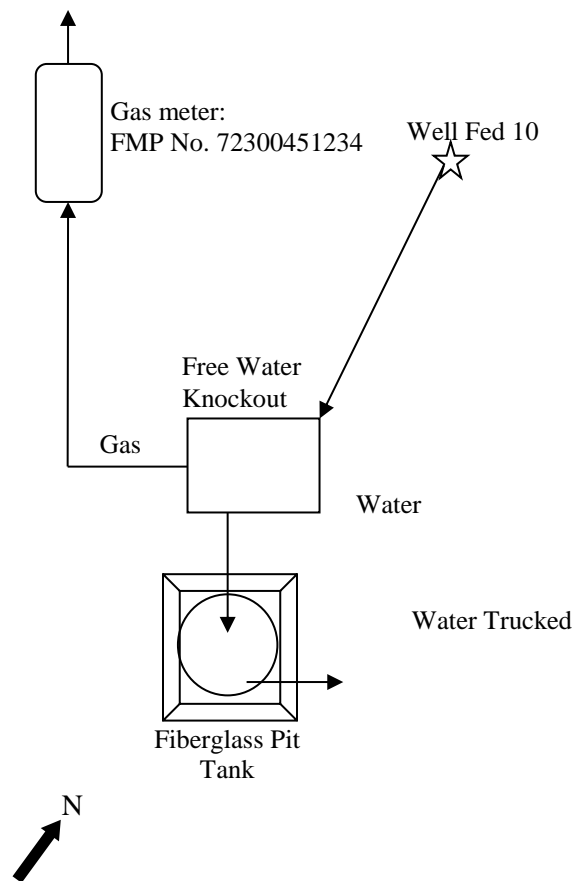
Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 1 of 1



Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 1 of 1



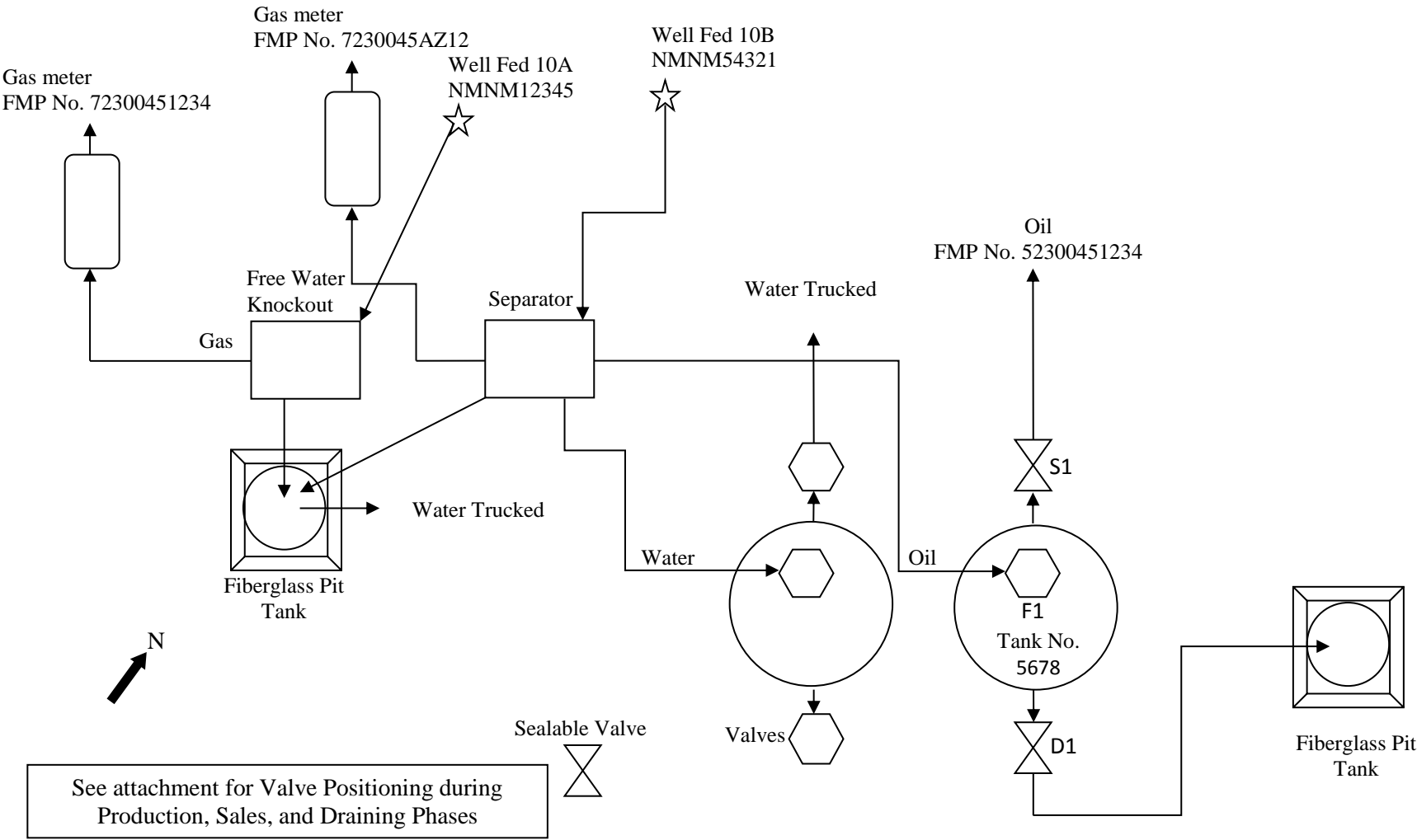
Free Water Knockout
Gas Usage 0.1 Mcf/day X days produced = Mcf per month.

Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM12345 and NMNM54321

Land Description: As defined in § 3170.3

Page 1 of 3



Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Diagram #I-C:

F1 is the Fill Valve
S1 is the Sales Valve
D1 is the Drain Valve

Valve Positioning in the Production Phase

Production into T5678
S1 is Sealed Closed
F1 is Open
D1 is Sealed Closed

Valve Positioning in the Sales Phase

Sales from T5678
S1 is Open
F1 is Open
D1 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5678
S1 is Sealed Closed
F1 is Open
D1 is Open

Free Water Knockout
Gas Usage $0.1 \text{ Mcf/day} \times \text{days produced} = \text{Mcf per month}$.

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Separator

Fire box rated at 150,000 btu/hour (btu/hr) operated, 20 hours/day (hrs/day)
 $150,000 \text{ btu/hr} \div 1157 \text{ btu/cubic foot (btu/ft}^3\text{)} \times 20 \text{ hrs/d} \div 1000 = 2.51 \text{ Mcf/day}$

Pump Jack

Manufacturer fuel use when operated at 75% of rated maximum RPM, 5.87 Mcf/hr X hours operating 12 hrs. = 70.44 Mcf/day

Water Tank

Tank Heater rated at 200,000 btu/hr operated 4 mo/yr (November, December, January, and February), 10 hrs/week,
 $200,000 \text{ btu/hr} \div 1157 \text{ btu/ft}^3 \times 40 \text{ hrs/mo} \div 1000 = 6.91 \text{ MCF/mo.}$

Oil Tank

Tank No.: 5678

Tank Heater rated at 200,000 btu/hr operated 4 mo/yr (November, December, January, February), 5 hrs/week
 $200,000 \text{ btu/hr} \div 1157 \text{ btu/ft}^3 \times 20 \text{ hrs/mo} \div 1,000 = 3.46 \text{ Mcf/mo.}$

1157 btu/ft³ as dry determined by gas analysis taken at FMP No. 7230045AZ12 on MM/DD/YYYY

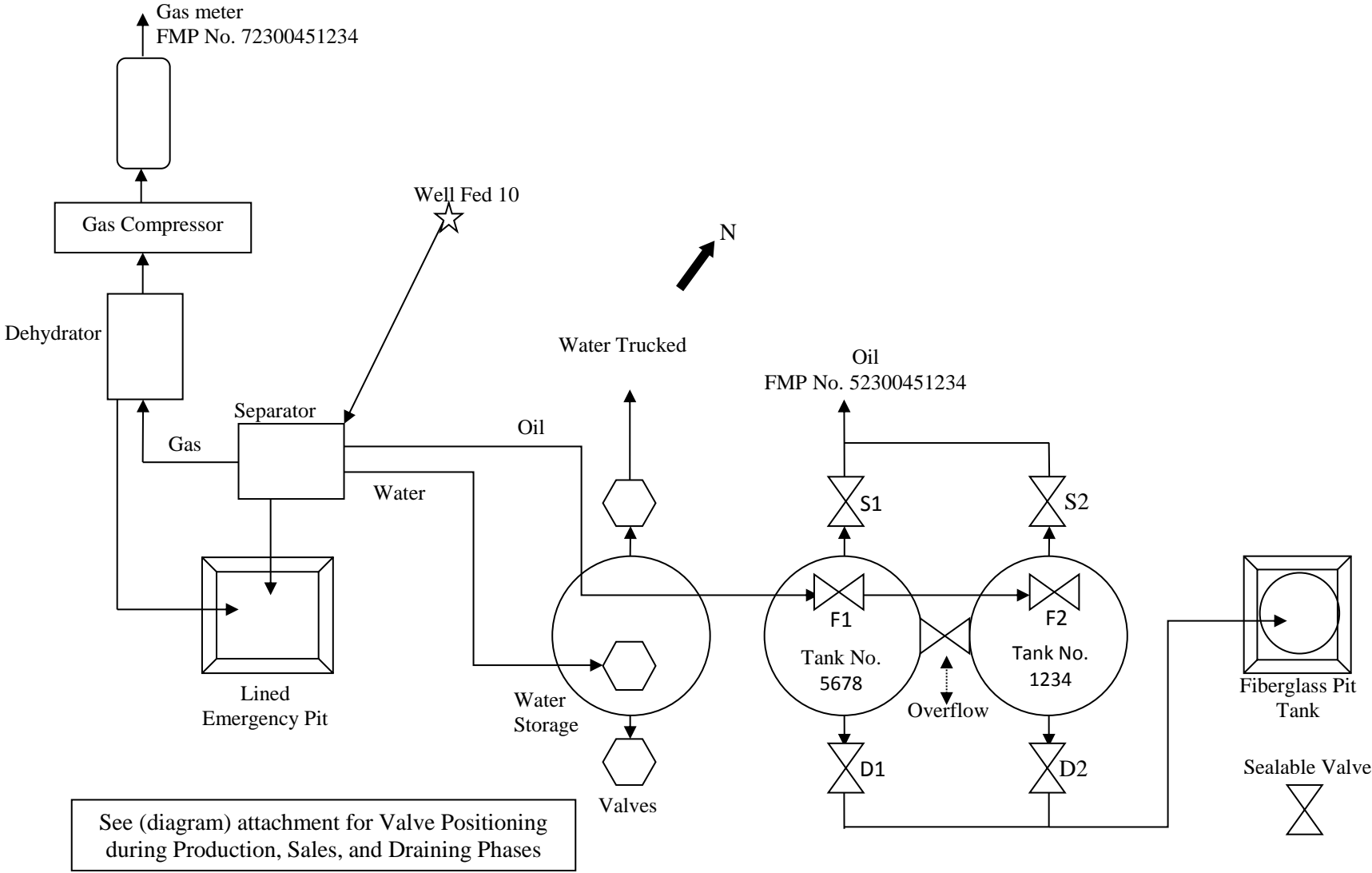
Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Land Description: As defined in § 3170.3

Page 1 of 3

T. 36 N., R. 11 W., sec. 2, NW1/4NE1/4 or Latitude and Longitude



Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Diagram #I-D:

F1 and F2 are Fill Valves
S1 and S2 are Sales Valves
D1 and D2 are Drain Valves

Valve Positioning in the Production Phase

Production into T5678	Production into T1234
S1 and D1 are Sealed Closed	S2 and D2 are Sealed Closed
Overflow/Equalizer is Open	Overflow/Equalizer is Open
F1 is open and F2 is Closed	F2 is Open and F1 is Closed

Valve Positioning in the Sales Phase

Sales from T5678 through S1:	Sales from T1234 through S2:
D1 and F1 are Sealed Closed	D2 and F2 are Sealed Closed
Overflow/Equalizer is Sealed Closed	Overflow/Equalizer is Sealed Closed
S1 is Open	S2 is Open
S2 Sealed closed	S1 sealed closed
F2 open	F1 open
D2 open or closed	D1 open or closed

Valve Positioning in the Drain Phase

Draining from T5678	Draining from T1234
S1 and F1 are Sealed Closed	S2 and F2 are Sealed Closed
Overflow/Equalizer is Sealed Closed	Overflow/Equalizer is Sealed Closed
D1 is Open	D2 is Open
S-2 2 sealed close	S1 sealed close
F2 open	F1 open
D2 open or closed	D1 open or closed

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Compressor

Manufacturer fuel use when operated at 80% of rated maximum, 24.87 Mcf/hr X 24 hrs. = 596.88 Mcf/day

Dehydrator

Fire box rated at 75,000 btu/hr operated, 20 hrs/day

$75,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 20 \text{ hrs/day} \div 1,000 = 1.30 \text{ Mcf/day}$

Separator

Fire box rated at 150,000 btu/hr operated 4 mo/yr, 20 hrs/day

$150,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 20 \text{ hrs/day} \div 1,000 = 2.59 \text{ Mcf/day}$

Water Tank

Tank Heater rated at 200,000 btu/hr operated 4 mo/yr, 10 hrs/week, 70% efficiency

$200,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 40 \text{ hrs/mo} \div 1,000 = 6.91 \text{ Mcf/mo.}$

Oil Tank No.: 5678

Tank Heater rated at 200,000 btu/hr operated 4 mo/yr, 5 hrs/week

$200,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 20 \text{ hrs/mo} \div 1,000 = 3.46 \text{ Mcf/mo.}$

Oil Tank No.: 1234

Tank Heater rated at 200,000 btu/hr operated 4 mo/yr, 5 hrs/week

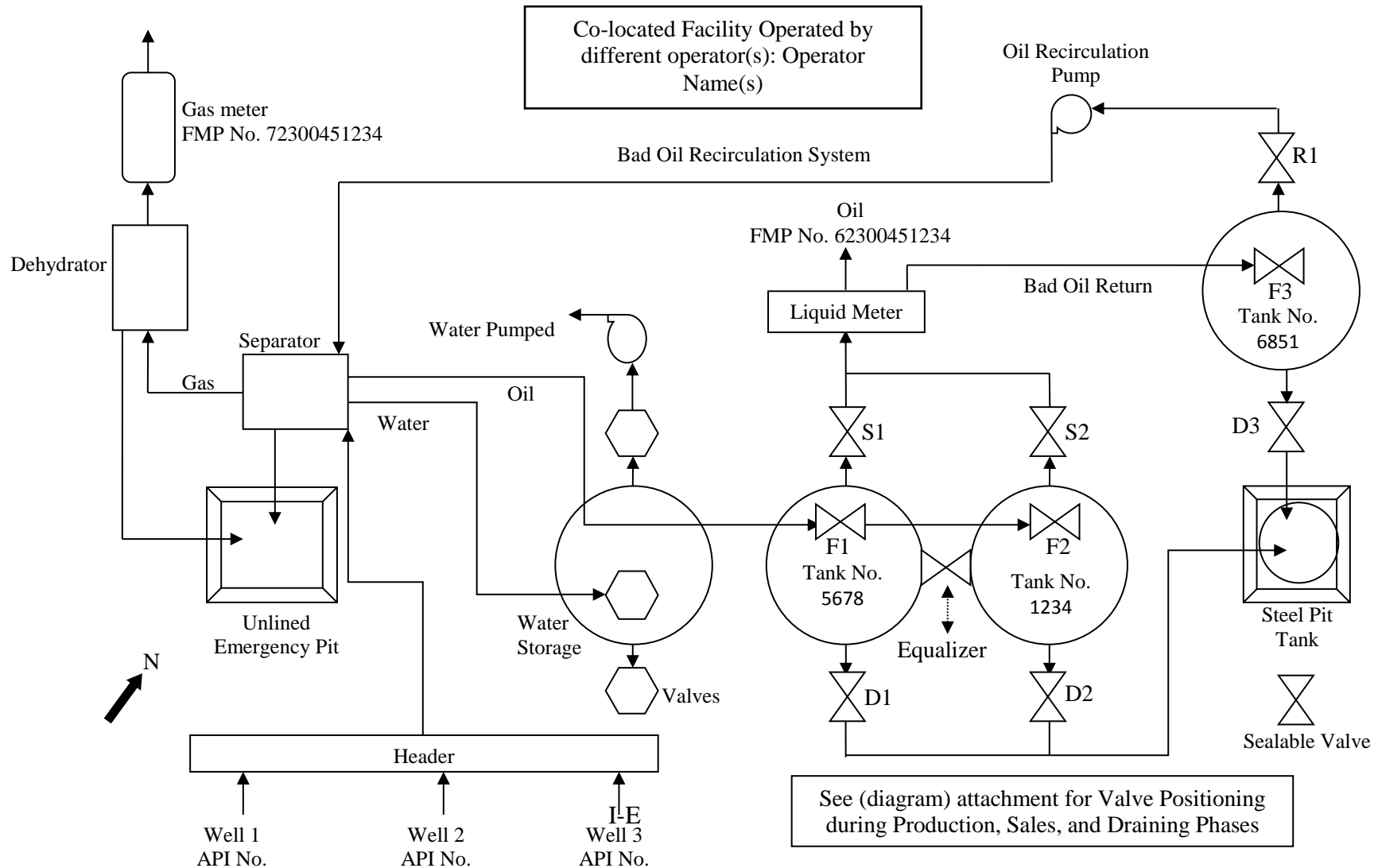
$200,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \text{ (see current gas analysis)} \times 20 \text{ hrs/mo} \div 1,000 = 3.46 \text{ Mcf/mo.}$

1157 btu/ft³ as dry determined by gas analysis taken at FMP No. 72300451234 on MM/DD/YYYY

Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Land Description: As defined in § 3170.3



Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Diagram #I-E:

F1, F2 and F3 are Fill Valves
S1 and S2 are Sales Valves
D1, D2 and D3 are Drain Valves
R1 is a Recirculation Valve

Valve Positioning in the Production Phase for FMP No. 62300451234

Production into 5678, 1234 and 6851
S1, F1, F2, F3 and R1 are Open
D1 and D2 are Sealed Closed
Equalizer is open

Valve Positioning in the Sales Phase

Production into 5678, 1234 and 6851
S1, F1, F2, F3 and R1 are Open
D1 and D2 are Sealed Closed
Equalizer is open

Valve Positioning in the Drain Phase

Draining from 5678
S1 and F1 are Sealed Closed
Equalizer is Sealed Closed
D1 and S2 are Open
D2 Sealed Closed

Draining from 1234
S2 and F2 are Sealed Closed
Equalizer is Sealed Closed
D2 and S1 are Open
D1 Sealed Closed

Draining from 6851
R1 is Sealed Closed
F3 is Sealed Closed
D3 Open

Dehydrator

Fire box rated at 75,000 btu/hr operated 24 hrs/day, 20 hrs/day
 $75,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 20 \div 1,000 = 1.30 \text{ Mcf/day}$

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Separator

Fire box rated at 150,000 btu/hr operated 4 mo/yr, 20 hrs/day
 $150,000 \text{ btu/hr} \div 1,157 \text{ btu/ft}^3 \times 20 \div 1,000 = 2.59 \text{ Mcf/day}$

1157 btu/ft³ as dry determined by gas analysis taken at FMP No. 72300451234 on MM/DD/YYYY

Charge pump, water pump and oil recirculation pump are electric motor/gasoline engine powered and not subject to royalty-free.

The following components on liquid measurement metering system will be effectively sealed (list as appropriate) for FMP No.: 62300451234

1. Sample probe;
2. Sampler volume control;
3. All valves on lines entering or leaving the sample container excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
4. Meter assembly, including the counter head and meter head;
5. Temperature averager/recorder;
6. Pressure adjustment on the back-pressure valve downstream of the meter;
7. CMS or LACT;
8. Any drain valves in the system;
9. Manual sampling valves (if so equipped);
10. Valves larger than 1 inch on the diverter lines;
11. Right-angle;
12. Totalizer; and
13. Prover connections.

I-F

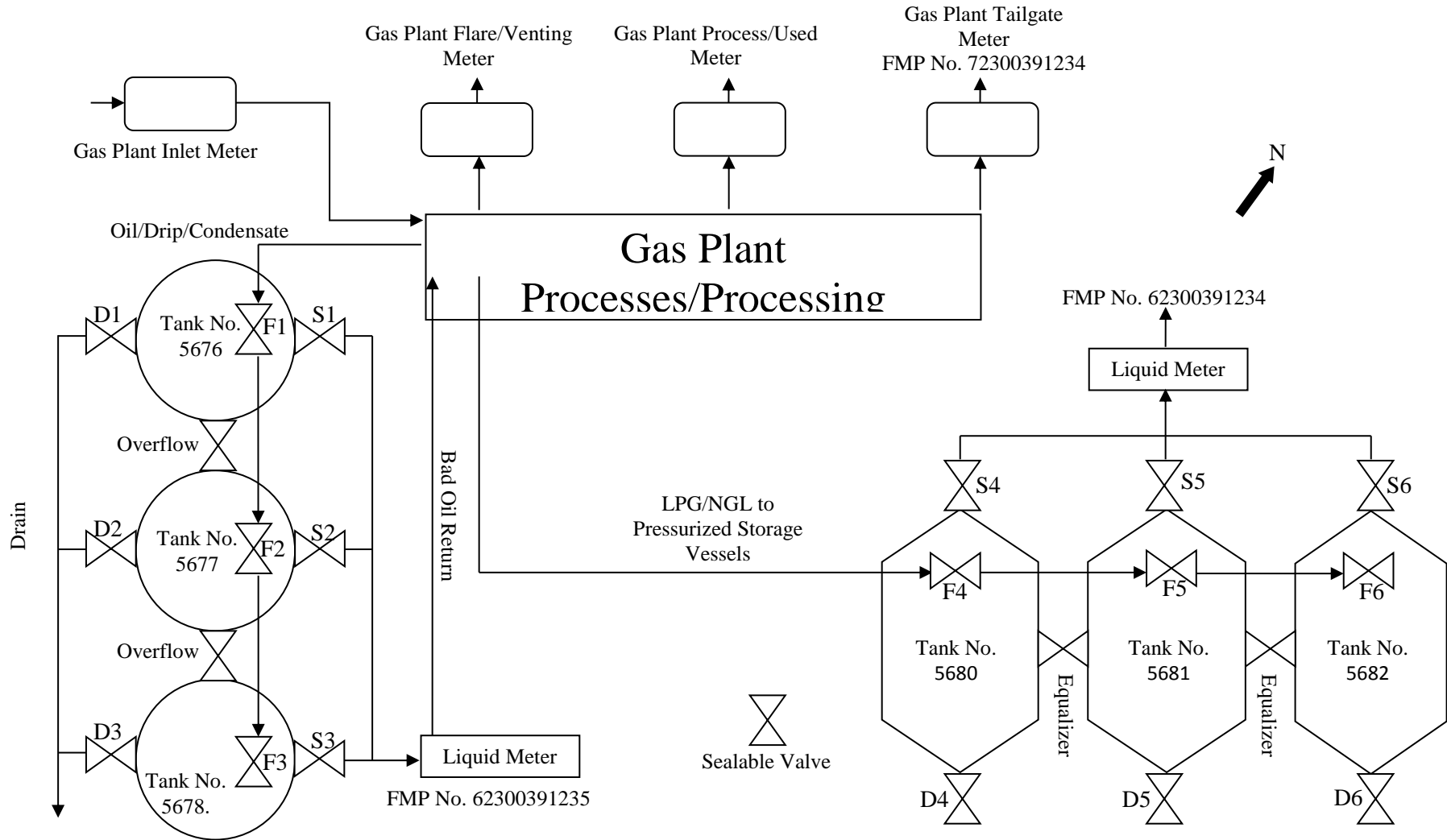
Facility Operator/Owner Name: Oil and Gas Plant Operations Inc.

Federal/Indian Lease, unit PA, or CA Number:

NMM12345 Land Description: As defined in § 3170.3

Page 1 of 3

T. 36 N., R. 11 W., sec. 2, NW1/4NE1/4 or Latitude and Longitude



I-F

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 2 of 3

Diagram #I-F:

F1, F2, F3, F4, F5, and F6 are Fill Valves
S1, S2, S3, S4, S5, and S6 are Sales Valves
D1, D2, D3, D4, D5 and D6 are Drain Valves

Valve Positioning in the Production Phase

Production into T5676	Production into T5677:	Production into T5678
D1 is Sealed Closed	D2 is Sealed Closed	D3 is Sealed Closed

Valve Positioning in the Sales Phase

Sales from T5676 through S1:	Sales from T5677 through S2:	Sales from T5678 through S3:
D1 is Sealed Closed	D2 is Sealed Closed	D3 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5676	Draining from T5677:	Draining from T5678
S1 is Sealed Closed	S2 is Sealed Closed	S3 is Sealed Closed
F1 is Sealed Closed	F2 is Sealed Closed	F3 is Sealed Closed
Overflow is Sealed Closed	Overflow is Sealed Closed	Overflow is Sealed Closed
D1 is Open	D2 is Open	D3 is Open

Valve Positioning in the Production Phase

Production into T5680	Production into T5681:	Production into T5682
D4 is Sealed Closed	D5 is Sealed Closed	D6 is Sealed Closed

Facility Operator/Owner Name: ABC Oil and Gas
 Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

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Valve Positioning in the Sales Phase

Sales from T5680 through S4:
 D4 is Sealed Closed

Sales from T5681 through S5:
 D5 is Sealed Closed

Sales from T5682 through S6:
 D6 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5680
 S4 is Sealed Closed
 F4 is Sealed Closed
 Overflow is Sealed Closed
 D4 is Open

Draining from T5681:
 S5 is Sealed Closed
 F5 is Sealed Closed
 Overflow is Sealed Closed
 D5 is Open

Draining from T5682
 S6 is Sealed Closed
 F6 is Sealed Closed
 Overflow is Sealed Closed
 D6 is Open

The following components on liquid measurement metering system will be effectively sealed (list as appropriate) for tanks numbered 5676, 5677, and 5678.

1. Sample probe;
2. Sampler volume control;
3. All valves on lines entering or leaving the sample container excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
4. Meter assembly, including the counter head and meter head;
5. Temperature averager/recorder;
6. Pressure adjustment on the back-pressure valve downstream of the meter;
7. CMS or LACT;
8. Any drain valves in the system;
9. Manual sampling valves (if so equipped);
10. Valves larger than 1 inch on the diverter lines;
11. Right-angle;
12. Totalizer; and
13. Prover connections.

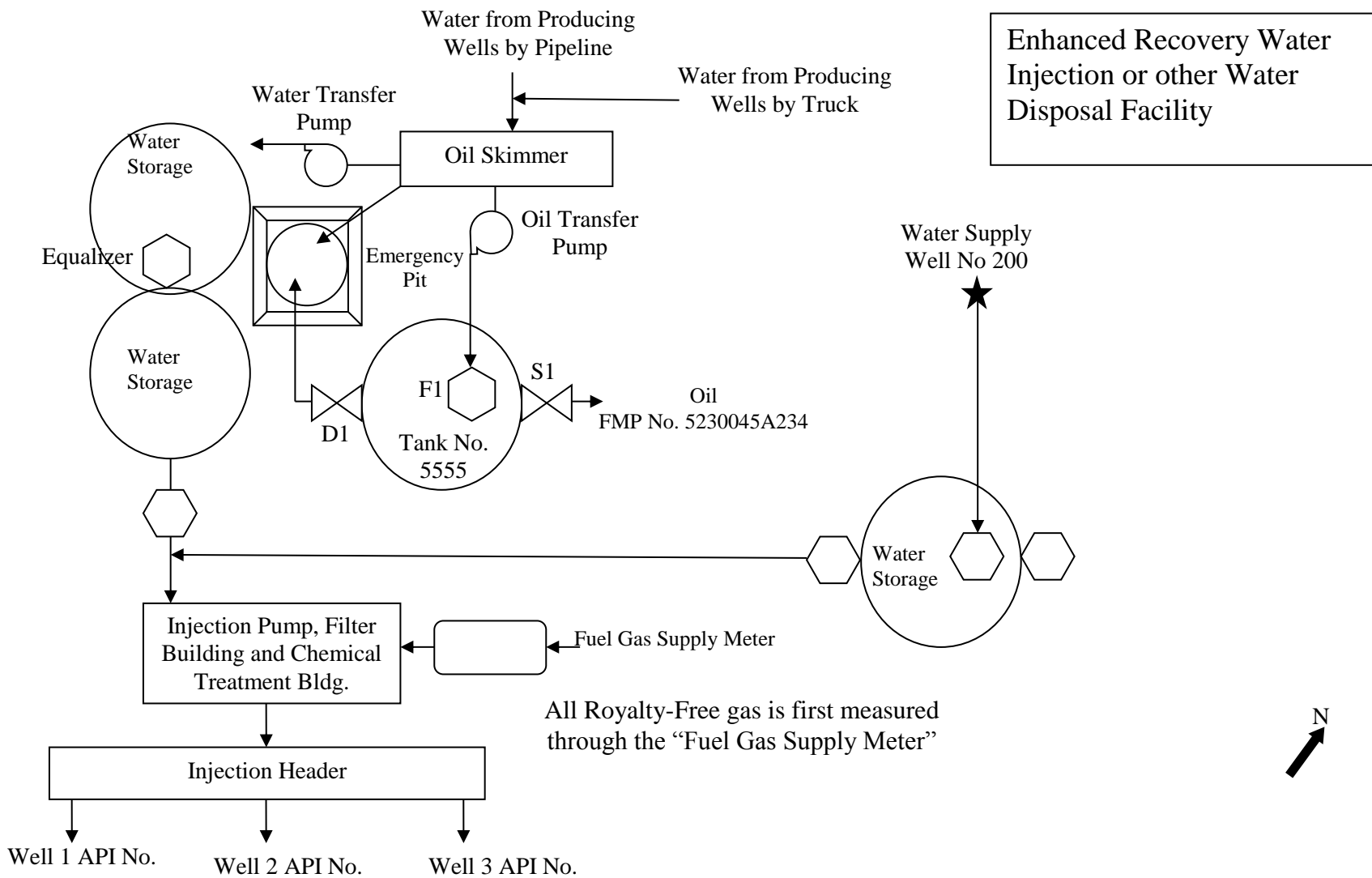
Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM98765

Land Description: As defined in § 3170.3

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T. 36 N., R. 11 W., sec. 2, NW1/4NE1/4 or Latitude and Longitude



I-G

Attachment

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM98765
Page 2 of 2

Diagram #I-G:

F1 is the Fill Valve
S1 is the Sales Valve
D1 is the Drain Valve

Valve Positioning in the Production Phase

Production into T5555
S1 is Sealed Closed
F1 is Open
D1 is Sealed Closed

Valve Positioning in the Sales Phase

Sales from T5555
S1 is Open
F1 is Open
D1 is Sealed Closed

Valve Positioning in the Drain Phase for

Draining from T5555
S1 is Sealed Closed
F1 is Open
D1 is Open

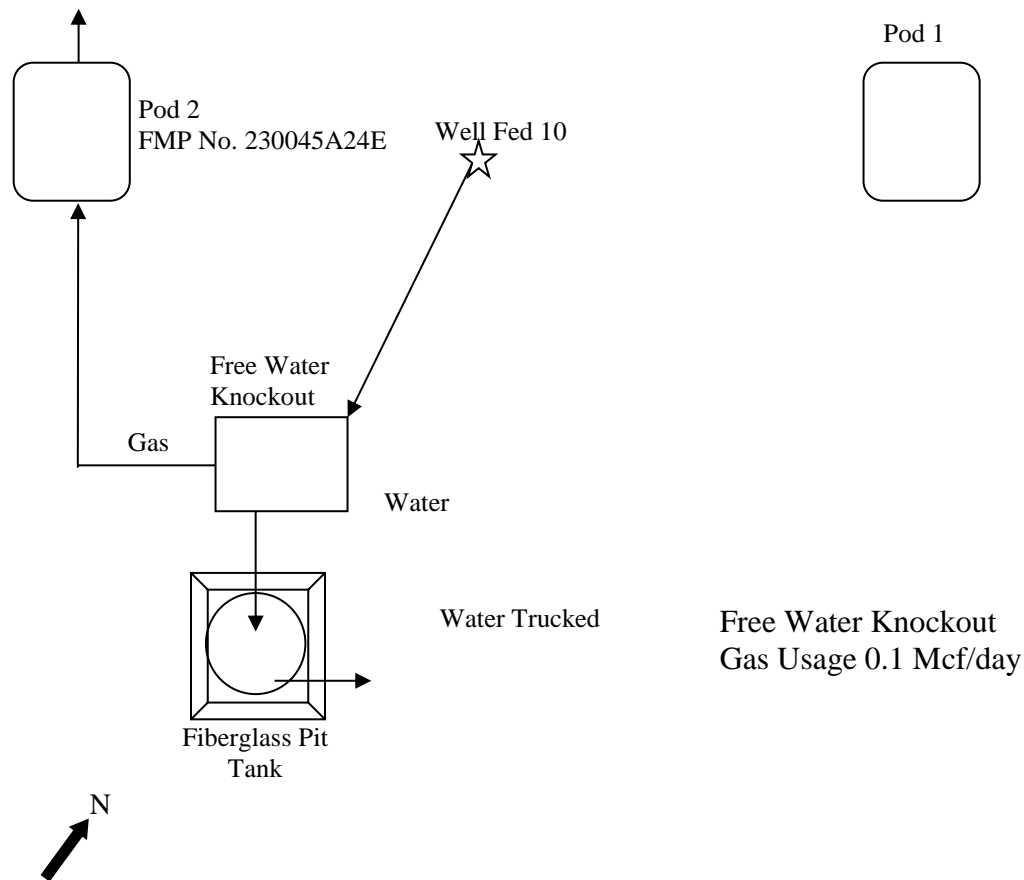
I-H

Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM98765 Land

Description: As defined in § 3170.3 Page 1 of 3

T. 36 N., R. 11 W., sec. 2, NW1/4NE1/4 or Latitude and Longitude



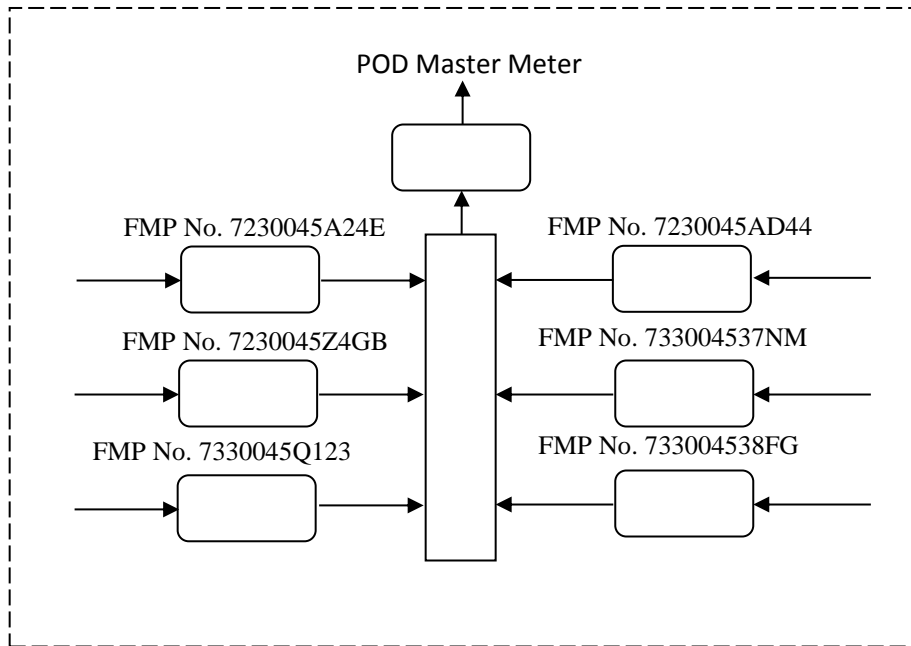
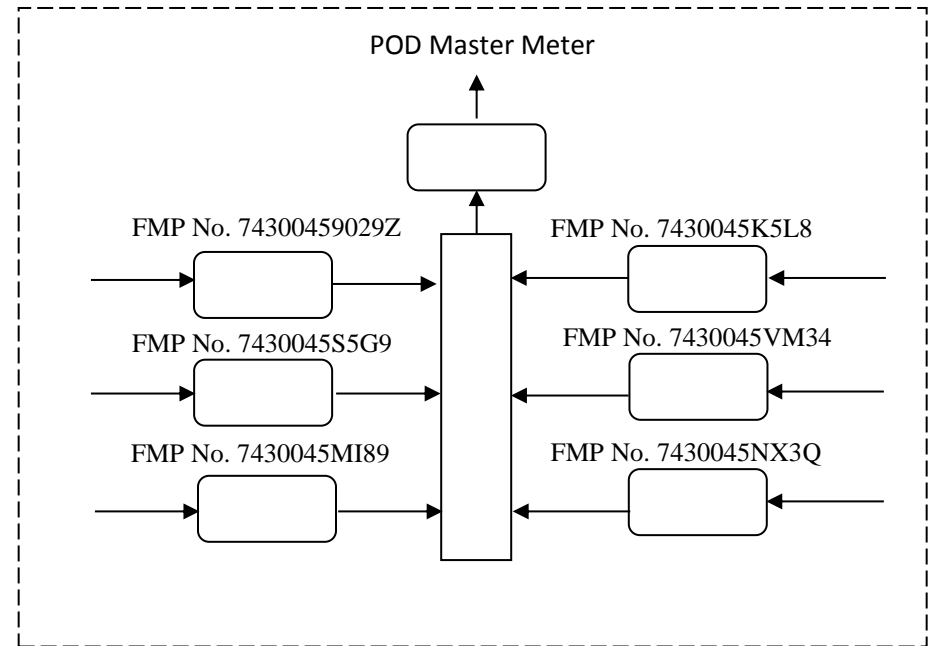
Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM98765

Land Description: As defined in § 3170.3

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T. 36 N., R. 11 W., sec. 2, NW1/4NE1/4 or Latitude and Longitude

POD Facility
2POD Facility
1

I-H

Federal/Indian Lease, unit PA, or CA Number: NMNM98765
Page 3 of 3

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3,

POD 1

FMP No. 74300459029Z

Federal/Indian Lease, unit PA, or CA Number: NMNM98765

FMP No. 7430045K5L8

Federal/Indian Lease, unit PA, or CA Number: NMNM98765

FMP No. 7430045S5G9

Federal/Indian Lease, unit PA, or CA Number: NMNM1234A

FMP No. 7430045VM34

Federal/Indian Lease, unit PA, or CA Number: NMNM56789D

FMP No. 7430045MI89

Federal/Indian Lease, unit PA, or CA Number: NMSF10254

FMP No. 7430045NX3Q

Federal/Indian Lease, unit PA, or CA Number: NMSF10254

POD 2

FMP No. 7230045A24E

Federal/Indian Lease, unit PA, or CA Number: NMNM56789

FMP No. 7230045AD44

Federal/Indian Lease, unit PA, or CA Number: NMNM54321A

FMP No. 7230045Z4GB

Federal/Indian Lease, unit PA, or CA Number: NMNM1234C

FMP No. 733004537NM

Federal/Indian Lease, unit PA, or CA Number: NMNM56789B

FMP No. 7330045Q123

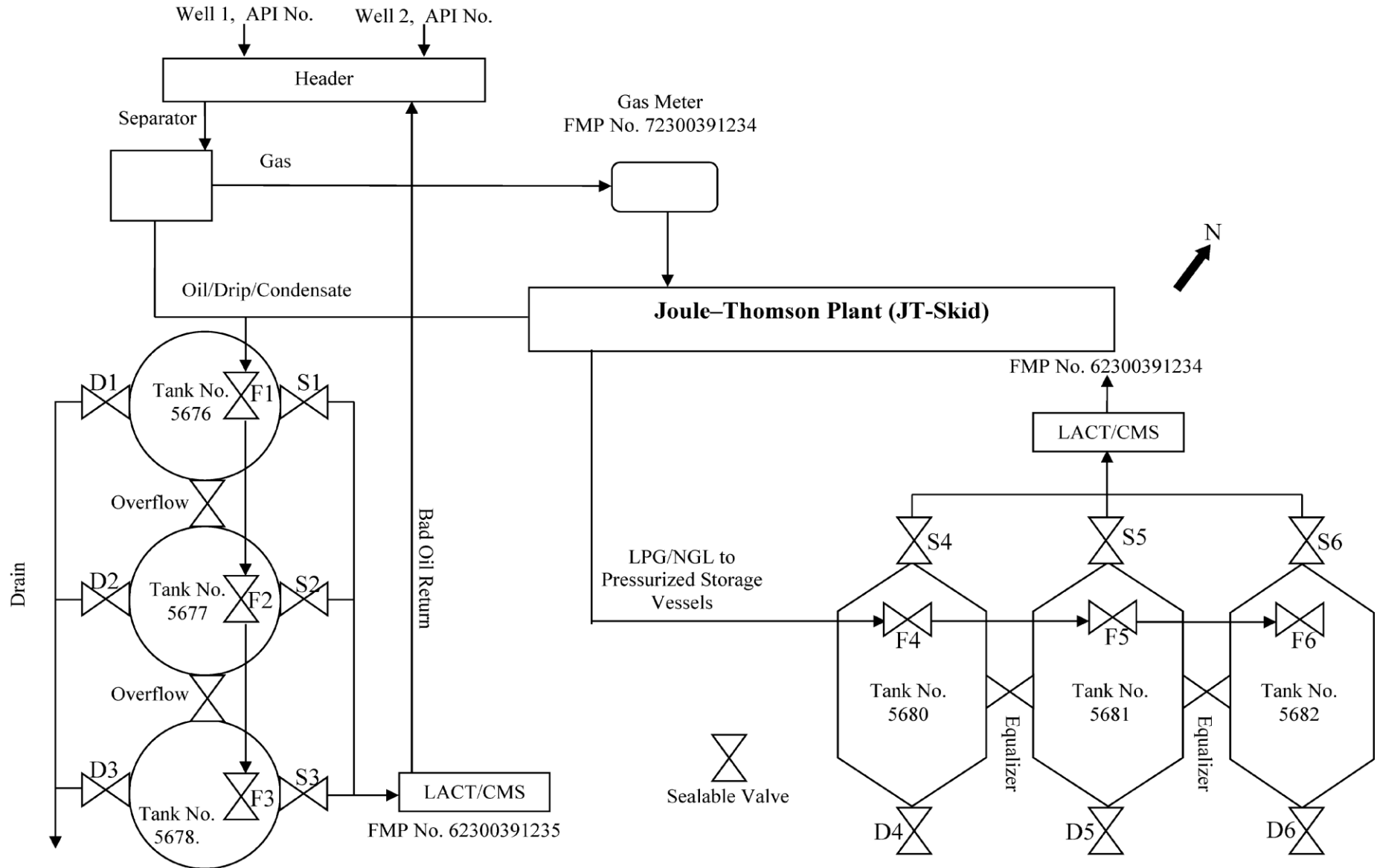
Federal/Indian Lease, unit PA, or CA Number: NMSF10983

FMP No. 733004538FG

Federal/Indian Lease, unit PA, or CA Number: NMSF10254

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 1 of 4



Facility Operator/Owner Name: ABC Oil and Gas
 Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
 Page 2 of 4

Diagram #I-I:

F1, F2, F3, F4, F5, and F6 are Fill Valves
 S1, S2, S3, S4, S5, and S6 are Sales Valves
 D1, D2, D3, D4, D5 and D6 are Drain Valves

Valve Positioning in the Production Phase

Production into T5676
 D1 is Sealed Closed

Production into T5677:
 D2 is Sealed Closed

Production into T5678
 D3 is Sealed Closed

Valve Positioning in the Sales Phase

Sales from T5676 through S1:
 D1 is Sealed Closed

Sales from T5677 through S2:
 D2 is Sealed Closed

Sales from T5678 through S3:
 D3 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5676
 S1 is Sealed Closed
 F1 is Sealed Closed
 Overflow is Sealed Closed
 D1 is Open

Draining from T5677:
 S2 is Sealed Closed
 F2 is Sealed Closed
 Overflow is Sealed Closed
 D2 is Open

Draining from T5678
 S3 is Sealed Closed
 F3 is Sealed Closed
 Overflow is Sealed Closed
 D3 is Open

Valve Positioning in the Production Phase

Production into T5680
 D4 is Sealed Closed

Production into T5681:
 D5 is Sealed Closed

Production into T5682
 D6 is Sealed Closed

Facility Operator/Owner Name: ABC Oil and Gas
 Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
 Page 3 of 4

Valve Positioning in the Sales Phase

Sales from T5680 through S4:
 D4 is Sealed Closed

Sales from T5681 through S5:
 D5 is Sealed Closed

Sales from T5682 through S6:
 D6 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5680
 S4 is Sealed Closed
 F4 is Sealed Closed
 Overflow is Sealed Closed
 D4 is Open

Draining from T5681:
 S5 is Sealed Closed
 F5 is Sealed Closed
 Overflow is Sealed Closed
 D5 is Open

Draining from T5682
 S6 is Sealed Closed
 F6 is Sealed Closed
 Overflow is Sealed Closed
 D6 is Open

The following components on liquid measurement metering system will be effectively sealed (list as appropriate) for tanks numbered 5676, 5677, and 5678.

1. Sample probe;
2. Sampler volume control;
3. All valves on lines entering or leaving the sample container excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
4. Meter assembly, including the counter head and meter head;
5. Temperature averager/recorder;
6. Pressure adjustment on the back-pressure valve downstream of the meter;
7. CMS or LACT;
8. Any drain valves in the system;
9. Manual sampling valves (if so equipped);
10. Valves larger than 1 inch on the diverter lines;
11. Right-angle;
12. Totalizer, manufacturer; and
13. Prover connections.

Facility Operator/Owner Name: ABC Oil and Gas

Federal/Indian Lease, unit PA, or CA Number: NMNM12345

Land Description: As defined in § 3170.3

Page 4 of 4

The following components on liquid measurement metering system will be effectively sealed (list as appropriate) for tanks numbered 5680, 5681, and 5682.

1. Sample probe;
2. Sampler volume control;
3. All valves on lines entering or leaving the sample container excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
4. Meter assembly, including the counter head and meter head;
5. Temperature averager/recorder;
6. Pressure adjustment on the back-pressure valve downstream of the meter;
7. CMS or LACT;
8. Any drain valves in the system;
9. Manual sampling valves (if so equipped);
10. Valves larger than 1 inch on the diverter lines;
11. Right-angle;
12. Totalizer, manufacturer; and
13. Prover connections.

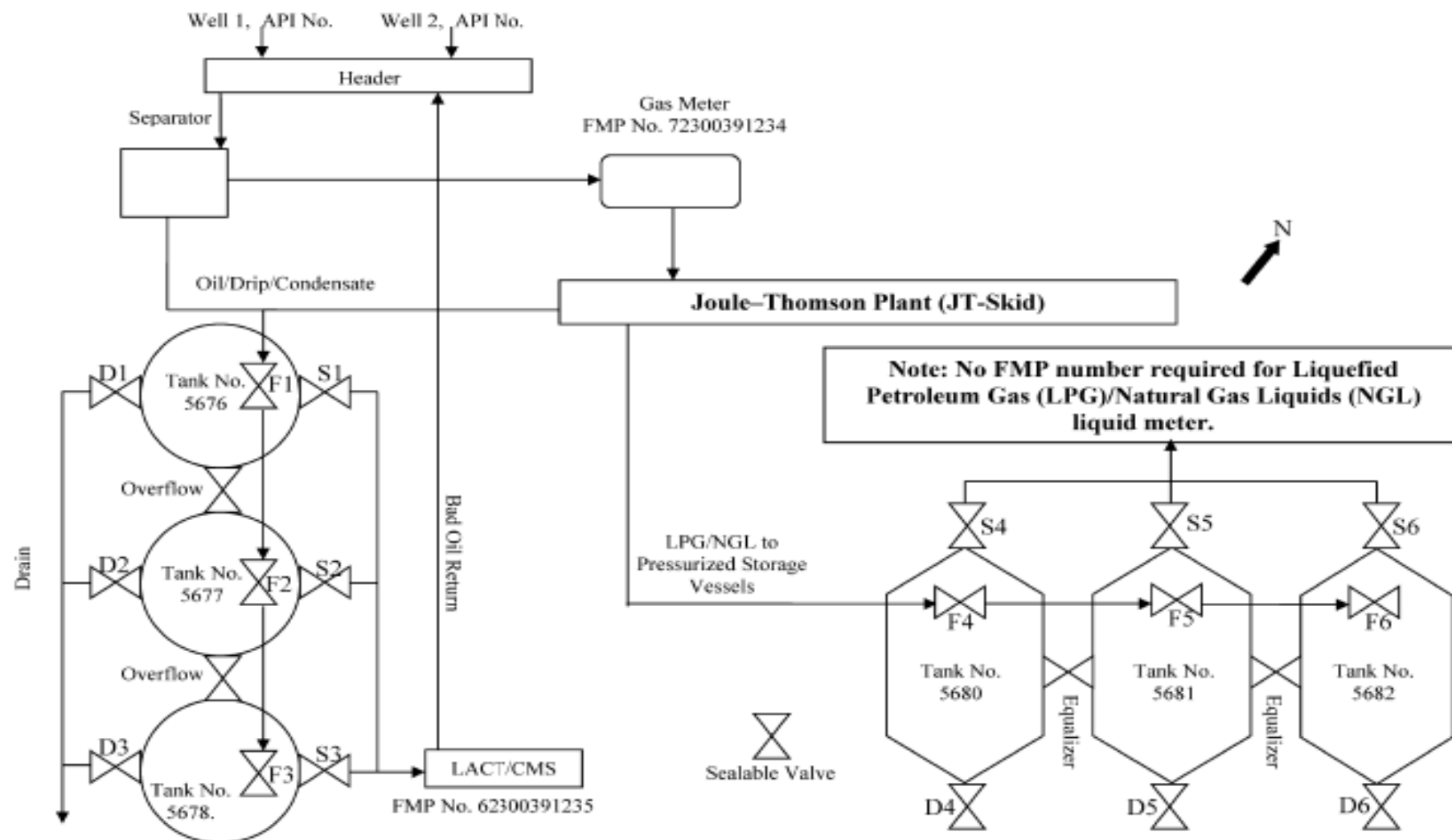
Separator

Fire box rated at 150,000 btu/hr operated, 20 hrs/day

$150,000 \text{ btu/hr} \div 1,450 \text{ btu/ft}^3 \text{ (estimated)} \times 20 \div 1,000 = 2.07 \text{ Mcf/day}$

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

I-J
Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 1 of 3



Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 2 of 3

Diagram #I-J:

F1, F2, and F3, are Fill Valves

S1, S2, and S3 are Sales Valves

D1, D2, and D3 Drain Valves

Valve Positioning in the Production Phase

Production into T5676

D1 is Sealed Closed

Production into T5677:

D2 is Sealed Closed

Production into T5678

D3 is Sealed Closed

Valve Positioning in the Sales Phase

Sales from T5676 through S1:

D1 is Sealed Closed

Sales from T5677 through S2:

D2 is Sealed Closed

Sales from T5678 through S3:

D3 is Sealed Closed

Valve Positioning in the Drain Phase

Draining from T5676

S1 is Sealed Closed

F1 is Sealed Closed

Overflow is Sealed Closed

D1 is Open

Draining from T5677:

S2 is Sealed Closed

F2 is Sealed Closed

Overflow is Sealed Closed

D2 is Open

Draining from T5678

S3 is Sealed Closed

F3 is Sealed Closed

Overflow is Sealed Closed

D3 is Open

Facility Operator/Owner Name: ABC Oil and Gas
Land Description: As defined in § 3170.3

Federal/Indian Lease, unit PA, or CA Number: NMNM12345
Page 3 of 3

The following components on liquid measurement metering system will be effectively sealed (list as appropriate) for tanks numbered 5676, 5677, and 5678.

1. Sample probe;
2. Sampler volume control;
3. All valves on lines entering or leaving the sample container excluding the safety pop-off valve (if so equipped). Each valve must be sealed in the open or closed position, as appropriate;
4. Meter assembly, including the counter head and meter head;
5. Temperature averager/recorder;
6. Pressure adjustment on the back-pressure valve downstream of the meter;
7. CMS or LACT;
8. Any drain valves in the system;
9. Manual sampling valves (if so equipped);
10. Valves larger than 1 inch on the diverter lines;
11. Right-angle;
12. Totalizer, manufacturer; and
13. Prover connections.

Separator

Fire box rated at 150,000 btu/hr operated, 20 hrs/day

$150,000 \text{ btu/hr} \div 1,450 \text{ btu/ft}^3 \text{ (estimated)} \times 20 \div 1,000 = 2.07 \text{ Mcf/day}$

1450 btu/ft^3 as dry determined by gas analysis taken at FMP No. 72300451234 on MM/DD/YYYY