



# **Oil & Gas Lease Program and Royalty Audit Report**

August 20, 2019

## EXECUTIVE SUMMARY

Opportune, LLP of Houston, Texas recently completed an oil and gas lease royalty audit report for four oil and gas wells associated with two Idaho Department of Lands oil and gas leases held by AM Idaho LLC. The results of Opportune LLP's audit report (**Attachment H**) and IDL's review of the financial obligations of AM Idaho LLC as an oil and gas producing lessee indicates that AM Idaho LLC owes the Idaho Department of Lands **\$50,361.57** for unpaid royalties. The following is the breakdown of the additional payments that are owed, which are explained in greater detail in this Oil & Gas Lease Program and Royalty Audit Report (see page references for each line item).

### **Residue Gas:**

- \$36,864.28 for the \$1.50/MCF transport charge improperly deducted from sales (pages 13-14).
- \$2,660.21 for additional royalty interest based on the Index Price (page 14).
- \$710.49 for Plant Fuel deducted during the Supplemental Audit Period (page 14).

### **Natural Gas Plant Liquids:**

- \$3,059.80 for the unexplained difference between Market Prices and Realized Prices (page 15).

### **Plant Condensate:**

- \$3,932.89 for the \$5.50/BBL transport charge improperly deducted from sales (pages 15-16).
- \$2,059.41 for the unexplained difference between Market Prices and Realized Prices (page 16).

### **Volume Reallocation:**

- \$1,074.49 for changes in Plant Condensate and Residue Gas volumes from the corrected allocations calculated from the Market Prices (pages 16-17).

Based on the information contained within this report and its attachments, which includes Opportune LLP's audit report, IDL has concluded that AM Idaho LLC is in default of the terms of the State of Idaho Oil and Gas Lease Nos. O-01983 and O-01996 and owes the Idaho Department of Lands payment in full for the royalties identified above. Additional payments including, but not limited to, interest; late fees; and administrative costs may also be required to return AM Idaho LLC from the "in default" status to the "in good standing" status with these two oil and gas leases.

## A. INTRODUCTION

Opportune, LLP of Houston, Texas (“Opportune”) recently completed an oil and gas lease royalty audit report (“Audit Report”) for four oil and gas wells associated with two Idaho Department of Lands (“IDL”) oil and gas leases held by AM Idaho LLC (“Alta Mesa”). The purpose of this document is to provide the information necessary to understand the financial obligations of Alta Mesa as an oil and gas producing lessee based on statutes, rules, lease language, and the results of the Audit Report

This document includes information related to:

- IDL’s authority to issue oil and gas leases;
- IDL’s oil and gas lease auctioning process;
- IDL’s existing active leases;
- Hydrocarbon production on state lands; and
- Royalty auditing.

Capitalized technical terms within this document are defined in a Glossary of Terms include as **Attachment A**.

## B. OIL AND GAS LEASING AUTHORITY

### B.1. IDAHO STATUTES

IDL operates its oil and gas leasing program subject to *Idaho Code Title 47 Mines and Mining – Chapter 8 Oil and Gas Leases on State and School Lands* as approved by the Idaho State Legislature. The following are the key components of Chapter 8 that direct IDL’s oil and gas leasing program:

47-801: Oil and gas leases may be issued for a term of up to 10 years.

Oil and gas leases may be extended beyond the initial term based on production in paying quantities or thereafter based on good faith drilling operations.

Oil and gas leases allow lessees to use and occupy the surface of leased lands to prospect, explore, drill, produce, refine and market hydrocarbons.

47-802: Land Board is authorized to establish rules related to oil and gas leasing.

47-804: Oil and gas leases are limited in area to one section or approximately 640 acres.

One party may hold more than one oil and gas lease.

- 47-805: Annual rental rates for oil and gas leases may not be less than \$0.25 per acre.  
Royalty rates for oil and gas leases may not be less than 12.5% of the hydrocarbons sold.
- 47-808: Oil and gas lessees are required to provide IDL with security in the amount of at least \$1,000 for each lease to cover damages to the surface and any improvements.  
Oil and gas lessees are required to provide IDL with security in the amount of at least \$6,000 for each lease upon commencement of operations for drilling any oil and gas well.
- 47-809: Land Board retains the right to terminate oil and gas leases for non-compliance, provided the lessee is given 90 days to cure the non-compliance issue(s).

## **B.2. ADMINISTRATIVE RULES**

IDL operates its oil and gas leasing program subject to Idaho Administrative Procedures Act (“IDAPA”) 20.03.16 – *Rules Governing Oil and Gas Leasing on Idaho State Lands* (“Rules”) as approved by the Idaho State Legislature. These Rules were first established on October 11, 1988 and were most recently amended on March 24, 2017. The following are the key components of the Rules that direct IDL’s oil and gas leasing program:

- Rule 010: Establishes definitions used throughout the Rules.
- Rule 022: Oil and gas leases are obtained through a competitive auction process. (022.01)  
Annual rental for oil and gas leases is \$3.00 per acre, with a \$250.00 minimum. (022.02)  
Auction procedures establish that the winning bidder at the auction shall pay IDL within 5 business days for the auction bid amount, the first year’s annual rent, and the nomination fee of \$250.00 (set by the Land Board). (022.07)
- Rule 045: Royalty payments shall be based on no less than 12.5% of all hydrocarbons produced and saved, except hydrocarbons consumed for the direct operation of the producing wells, commonly known as “lease fuel.” (045.01)  
Oil and gas royalty payments to IDL may not be directly or indirectly reduced based on the costs for marketing, transporting or processing of the produced hydrocarbons. (045.02)  
Royalty payments for oil shall be due on or before the 65<sup>th</sup> day after the month of production. (045.03a)  
Royalty payments for gas and natural gas plant liquids shall be due on or before the 95<sup>th</sup> day after the month of production. (045.03b)



Oil and gas lessees must maintain and make available records confirming gross production, disposition, and market price of hydrocarbons produced from oil and gas wells. (045.03d)

Rule 055: Oil and gas lessees shall comply with all rules of the Oil and Gas Commission. (055.02)

Rule 080: Oil and gas lessees are required to provide IDL with security in the amount of \$1,000 for each lease prior to entry with motorized exploration equipment. (080.01)

Oil and gas lessees are required to provide IDL with security in the amount of at least \$6,000 for each lease prior to entry with well drilling equipment or commencing with construction related to future drilling. (080.01)

A “statewide” bond in the amount of \$50,000 is allowed in lieu of individual bonds for exploration or well drilling related activities. (080.02)

Rule 090: Oil and gas lessees are required to provide proof of liability insurance to IDL in the amount of \$2,000,000.

## C. LEASING PROCESS AND AUCTIONS

All active oil and gas leases on state lands were issued by IDL via public auctions. The most recent public auction was held in October 2016. IDL initiated and administered these public auctions based on tract nominations made by outside parties. IDL reviewed the nominations for completeness, the need for special terms and conditions for the lease, and minerals estate ownership. IDL then advertised and held public auctions in accordance with the Idaho Statutes and Rules in place at that time.

In 2017, IDL received approval for changes to IDAPA 20.03.16 from the Idaho State Legislature that included clarification of the nomination, auctioning, and general lease acquisition process benefitting both auction participants and IDL. The following are the key components of the existing auction process based on IDAPA 20.03.16 and Land Board policy:

- Tract nominations are due at least 90 days prior to a scheduled auction closing date;
- Each tract nomination requires a \$250 nomination fee, paid by all auction participants and refunded to non-winners;
- Auctions may be held on-line;
- Minimum auction bid increments are \$1.00;
- Payment of the winning bid and first year’s annual rent is due following an auction;
- Leases are offered to the nominator if no bidding occurs at an auction; and
- Auction winners are required to execute offered leases within 30 days.

IDL currently posts an “Oil and Gas Lease On-line Auction Schedule” on the IDL public website. The schedule identifies the Nomination Closing Date and the Auction Opening and Closing Dates. Auctions are scheduled four times each year in January, April, July, and October. IDL is prepared to offer leases via an on-line auctioning website operated by EnergyNet, a nationally recognized auctioning firm, under a signed agreement with IDL. Since the changes to IDAPA 20.03.16 in 2017, no tract nominations have been submitted to IDL.

## **D. ACTIVE OIL AND GAS LEASES**

### **D.1. GENERAL LOCATION AND GEOLOGIC SETTING**

In 1903, the first recorded oil and gas well in Idaho was drilled on the eastern margin of the state in Fremont County, followed by a few others including a well drilled in 1907 in the Payette area. Through 1988, about 150 wells were drilled in Idaho, but no production occurred. In southwest Idaho, historic drilling, mostly in Payette County, encountered non-economic amounts of natural gas (primarily methane) in about a dozen wells.<sup>1, 2, 3, 4</sup>

Aside from a dry well near Gray's Lake in 2007, no other oil and gas activity occurred in Idaho until 2008 when Bridge Energy and Paramax Resources started exploring in the Weiser-Payette Basin. They leased thousands of acres from mineral owners (private, state, and federal), performed seismic reflection surveys, and drilled 11 wells. Three wells were dry and immediately plugged. In 2010, natural gas and liquid hydrocarbons were found in eight wells. Bridge Energy was unable to process and market the hydrocarbons, which caused financial difficulties. In 2012, their wells and leases were sold to AM Idaho, LLC, a subsidiary of Houston-based Alta Mesa. Alta Mesa entered into a joint operating agreement with Snake River Oil and Gas (a subsidiary of Arkansas-based Weiser-Brown Oil Co.), which also has a large leasehold interest in Southwest Idaho.<sup>5</sup> In 2014, Idaho became the 31<sup>st</sup> oil and gas producing state when the ML Investment 1-10 well began producing liquid-rich gas (Rich Gas) and a gas-rich light liquid (Well Condensate) from Willow Field. Also, in 2014, the State 1-17 well began producing methane from the Hamilton Field.

Well production from the Willow Field is transported by gathering pipelines to Alta Mesa’s Little Willow Gathering Facility for initial processing. Well Condensate and Rich Gas are then transported 11 miles in separate pipelines to the Northwest Gas Processing Highway 30 Plant. This plant, which is a subsidiary of Alta Mesa, processes Well Condensate into marketable Plant Condensate, and also processes Rich Gas into marketable Residue Gas and marketable plant products of Natural Gas (Plant) Liquids (“NGLs”). A Location Map is included as **Attachment B**.

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<sup>1</sup> Buwalda, J.P., 1923. A preliminary reconnaissance of the gas and oil possibilities of southwestern and south-central Idaho. Idaho Geological Survey, Pamphlet No. 5.

<sup>2</sup> McLeod, J. D., 1993. The search for oil and gas in Idaho. Idaho Geological Survey GeoNote 21.

<sup>3</sup> Newton, V. C., and R. E. Corcoran, 1963. Petroleum geology of the western Snake River basin, Oregon-Idaho: Oregon Department of Geology and Mineral Industries Oil and Gas Investigation 1, 67 p.

<sup>4</sup> Wood, S. H., 1994. Seismic expression and geological significance of a lacustrine delta in Neogene deposits of the western Snake River Plain, Idaho. Bulletin of the American Association of Petroleum Geologists, 78 (1), 102-121.

<sup>5</sup> Johnson, Z., Cook, P.S., O’Laughlin, J.O., and Bird, K., 2013. Oil and Gas Resource Exploration and Development Policies in Idaho. University of Idaho, Policy Analysis Group, College of Natural Resources Report No. 33, 77 pages.

**D.2. LESSEES, LEASE SIZE, AND COUNTY LOCATIONS**

Currently, IDL administers 568 active oil and gas leases covering 40,672 acres that are issued to the following entities:

- AM Idaho LLC;
- CPC Minerals LLC;
- David Clegg;
- Double Diamond Ranch;
- Morris Creighton;
- Snake River Oil and Gas LLC; and
- Trendwell West, Inc.

The number of active leases is misleading in that many cover small tracts of land as required by previous language within IDAPA 20.03.16 that prevented IDL from combining tracts from different sections of land into one oil and gas lease. The Rule language was changed in 2017 to allow IDL the discretion to combine leases that cross section boundaries. All 568 active oil and gas leases were issued prior to 2017 and adhere to the limitation that resulted in leases as small as 0.05 acres. The following is a breakout of 568 active leases by acreage:

ACREAGE	NUMBER OF LEASES
0 to less than 10 acres	183
10 to less than 40 acres	148
40 to less than 80 acres	108
80 acres to 640 acres	129
	568

The state lands associated with the active 568 oil and gas leases include state endowment trust lands, lands owned by other state agencies and public trust lands (Navigable Waters Fund). The following is a breakout of the ownership of the lands within the active leases that cover 40,672 acres:

OWNERSHIP	LEASES*	ACRES
Penitentiary	2	94
Military Division	3	9
Agricultural College	5	1,286
State Hospital South	6	434
School of Science	9	969
University of Idaho	9	1,480
Charitable Institutions	10	4,105
Normal School	22	2,412
Idaho Fish & Game	33	2,598
Public Schools	99	17,166
Navigable Waterways Fund	214	7,745
Idaho Transportation Dept.	226	2,372

\* The total number of leases (638) in the chart exceeds the number of active leases (568) because more than one endowment can be the owner of the lands under a given oil and gas lease

The following chart identifies the lessee, the location by county, the number of leases by lessee and the associated acres for the 568 active leases:

### ACTIVE OIL & GAS LEASES ON STATE LANDS BY COUNTY

LESSEE	ADA	BONNEVILLE	CANYON	CASSIA	GEM	OWYHEE	PAYETTE	WASHINGTON	TOTALS
AM Idaho LLC	39 3,586 acres		197 10,494 acres	1 600 acres	76 5,491 acres	8 2,208 acres	125 6,651 acres	29 2,923 acres	475 31,954 acres
CPC Minerals LLC		1 640 acres							1 640 acres
David Clegg		1 640 acres							1 640 acres
Double Diamond Ranch				1 305 acres					1 305 acres
Morris Creighton					5 25 acres		8 66 acres		13 91 acres
Snake River Oil and Gas LLC					16 833 acres		45 1806 acres	2 50 acres	63 2,689 acres
Trendwell West, Inc.					5 353 acres	8 3840 acres	1 160 acres		14 4,353 acres
<b>TOTALS</b>	39 3,586 acres	2 1,280 acres	197 10,494 acres	2 905 acres	102 6,702 acres	16 6,048 acres	179 8,683 acres	31 2,973 acres	568 40,672 acres

## E. HYDROCARBON PRODUCTION ON STATE LANDS

### E.1. ROYALTY OWNERSHIP AND PRODUCTS PRODUCED

Alta Mesa holds the two IDL oil and gas leases and operates the four wells depicted on the map in **Attachment B**. Three of the four wells are not actually located on state ownership but are located within the established drilling units that drain the State’s mineral estate. Lease O-1996 includes 40 acres (mineral and surface estate) of Public School endowment land out of the 640 acre drilling unit and Lease O-01983 includes 600 acres (mineral estate only) of Public School endowment land out of the 640 acre drilling unit.

The following chart identifies the royalty interest for each of the four wells. The royalty interest is calculated by multiplying the ownership of the drilling unit times the royalty rate.

LEASE	WELL NAME	STATE LAND/UNIT	OWNERSHIP	ROYALTY RATE	ROYALTY INTEREST
O-1996	ML Investments 1-10	40 acres/640 acres	6.25% or 0.0625	12.5% or 0.125	0.0078125
	ML Investments 2-10	40 acres/640 acres	6.25% or 0.0625	12.5% or 0.125	0.0078125
	ML Investments 3-10	40 acres/640 acres	6.25% or 0.0625	12.5% or 0.125	0.0078125
O-1983	State 1-17	600 acres/640 acres	93.74% or 0.9375	12.5% or 0.125	0.1171875

The following chart provides the names, the commonly used abbreviations and the chemical formulas for the hydrocarbons produced from these wells, which can be in both gaseous and liquid phases depending on the temperature, pressure, and mixture of the product, when it is measured:

PRODUCT	ABBREVIATION	CHEMICAL FORMULA
Methane	C1	CH <sub>4</sub>
Ethane	C2	C <sub>2</sub> H <sub>6</sub>
Propane	C3	C <sub>3</sub> H <sub>8</sub>
Butane	C4	C <sub>4</sub> H <sub>10</sub>
Pentane	C5	C <sub>5</sub> H <sub>12</sub>
Hexane	C6	C <sub>6</sub> H <sub>14</sub>
Heptane	C7	C <sub>7</sub> H <sub>16</sub>
Octane and Heavier	C8+	C <sub>N</sub> H <sub>2N+2</sub>

The following chart identifies the products have been produced from the four wells on which Alta Mesa has paid royalties:

LEASE	FIELD	WELL NAME	PRODUCTS
O-1996	Willow	ML Investments 1-10	Residue Gas, Condensate, NGLs
	Willow	ML Investments 2-10	Residue Gas, Condensate, NGLs
	Willow	ML Investments 3-10	Residue Gas, Condensate, NGLs
O-1983	Hamilton	State 1-17	Residue Gas

## E.2. ML-INVESTMENT WELLS

Three ML-Investments wells are associated with Lease O-01996 and produced hydrocarbons during the Audit Period. ML 1-10 was shut in during February 2016. The following is a summary of how each well produced a fluid that is first processed into what is generically referred to as Gas and Condensate (a light Crude Oil), and then processed into three marketable products. Some wells differ in what is presented here because of various technical or operational constraints associated primarily with the location of each well in relation to the production process. A simplified process flow diagram is included as **Attachment C**.

The fluid stream from each well is run through its own 3-phase gravity separator, which produces Formation Water (not discussed further), Rich Gas, and Well Condensate. Rich Gas mostly consists of methane, ethane, propane, and the butanes, with smaller components of pentanes, hexanes, and heptanes. The Rich Gas is transported from separators by gathering pipelines to the Little Willow Gathering Facility, where additional water and liquid hydrocarbons are removed. The Rich Gas is then transported 11 miles by pipeline to the Northwest Gas Processing, LLC – Highway 30 Plant. At the Highway 30 Plant, the Rich Gas undergoes further processing until the remaining Residue Gas meets interstate pipeline quality natural gas requirements (89-94% methane, minimal water vapor, etc.). The Residue Gas is then compressed and injected into the Williams Northwest Pipeline. At this point, the Residue Gas is valued on an agreed-upon gas sales Index (less allowable contract-defined costs)

and purchased by a Broker, Marketer, or End Purchaser for delivery to various potential commercial users or residential distributors along the route of the Williams Northwest Pipeline.

The liquids removed from the Rich Gas at the Highway 30 Plant are called NGLs and are also referred to as Plant Products. NGLs consist of a mixture of ethane, propane, isobutane, normal butane, and Pentanes plus heavier molecular-weight hydrocarbon components (referred to as Pentanes Plus or Natural Gasoline). The mixed NGL components are also referred to as Y-Grade, raw mix, or raw make. The Y-Grade NGLs are trucked in specialized tankers from the Highway 30 Plant to a rail loading facility in Ontario, Oregon. Truck loads are transloaded into specialized rail tanker cars. Once the railroad accepts the full load for each NGL railcar, the ownership transfers to the Broker, Marketer, or End Purchaser. The Broker, Marketer, or End Purchaser arranges for the Y-Grade NGLs to be railed to a highly-specialized processing plant called a Fractionator. Idaho Y-Grade NGL goes to one of four fractionators located at or near Conway, Kansas, where the mixed NGL components are split into the individual purity components of ethane, propane, isobutane, normal butane, and Pentanes Plus. The individual purity components are then valued at the outlet of the Fractionator against an agreed-upon NGL Index (less fractionation costs, and other allowable contract-defined costs), and then transported by pipeline or railcar to a petrochemical facility. For example, purity ethane may be purchased and transported from Conway to an Ethane Cracker located on the Gulf Coast of Texas to be processed into ethylene, a base stock for the manufacture of various polyethylene plastics.

Well Condensate (also called Lease Condensate) at the outlet of the 3-phase separators mostly consists of pentanes and heavier molecular weight hydrocarbons, and lesser amounts of methane, ethane, propane, and the butanes. Well Condensate is then transported from separators by gathering lines to the Little Willow Gathering Facility, where some gaseous hydrocarbons are “flashed” from the Well Condensate and captured into the Rich Gas stream. At this point in the process, the Well Condensate is still too volatile (unstable) for truck transport. Therefore, it is transported 11 miles by its own pipeline to the Highway 30 Plant and undergoes significant processing in order to meet specific transportation and contractual requirements. At the plant outlet, the well condensate is now called Plant Condensate. Plant Condensate is trucked in specialized tankers from the Highway 30 Plant to a rail loading facility in Ontario, Oregon. Truck loads are transloaded into specialized rail tanker cars. Once the railroad accepts the full load for each plant condensate railcar, the ownership transfers to the End Purchaser. The End Purchaser is one of several refineries north of Salt Lake City, Utah. The price is determined at the refinery entrance, based on specialized in-situ tests or by laboratory analysis. The tests or analyses determine the value of the Plant Condensate by comparing results to an agreed-upon Benchmark oil value, less other allowable contract-defined costs.

### **E.3. STATE 1-17 WELL**

The well named State 1-17 associated with Lease O-01983 has been shut-in and not producing since April of 2017. It had produced a small volume of anomalously-pure methane that required almost no processing after leaving the wellhead before being accepted as a pipeline quality natural gas into an adjacent Intermountain Gas distribution pipeline. At this point, the methane was valued on an agreed-upon gas sales Index (less allowable contract-defined costs), and then delivered by Intermountain Gas to a New Plymouth public school. A simplified process flow diagram is included as **Attachment D**.

## F. OIL AND GAS LEASE ROYALTY AUDITING

### F.1. CONTRACTING AND SCOPE OF WORK

In 2017, the IDL initiated a Request for Proposal (“RFP”) to identify and contract with a third-party oil and gas lease royalty auditor. As a result of the RFP, IDL executed a contract on September 7, 2018 with Opportune of Houston, Texas, the only responsive party.

Contract IDL RFP 18-400 (“Contract”) included a Scope of Work (**Attachment E**) for auditing services to determine whether royalties paid to IDL for oil and gas produced from oil and gas wells under two state leases with Alta Mesa during the Audit Period, complied with the terms of:

- Idaho Statute: Title 47 Mines and Mining, Chapter 3 - Oil and Gas Wells and Title 47 Mines and Mining, Chapter 8 - Oil and Gas Leases on State and School Lands;
- IDAPA 03.16.20.03.16: Rules Governing Oil and Gas Leasing on Idaho State Lands; and
- Lease Agreements: O-01983 and O-01996.

The Contract initially identified the Original Audit Period as August 2015 through December 2016. The Contract was subsequently amended to include January 2017 through August 2018. This additional timeframe is identified in Opportune’s Audit Report as the Supplemental Audit Period. The Original Audit Period plus the Supplemental Audit Period is herein referred to as the Audit Period.

More specifically, the Scope of Work for the Contract included the following:

- A review and summary of documents provided by Alta Mesa, such as sales contracts, gathering contracts, and processing contracts, with a focus on pricing, allowable deductions, processed gas percentages, liquid settlement percentages, and custody point determinations;
- An analytical review of volume and payment reconciliations of the Audit Period data set and documentation of any significant differences pertinent to the audited leases;
- Confirm that arms-length sales transactions identified by Alta Mesa represent appropriate arms-length transactions through a review of hydrocarbon sales points;
- Propose recommendations for additional auditing tasks beyond the scope of this limited oil and gas audit that would be beneficial to IDL and beneficiaries; and
- Document any significant findings that may warrant further investigation by IDL.

Deliverables under the Contract included:

- An Audit Report to IDL summarizing and documenting the audit findings;
- An in-person presentation of the audit findings and information related to the auditing process at a regular meeting of the Land Board; and
- A general audit review workshop for IDL and Land Board Staff to include: the auditing process, methods, and practices; recommendations for future best management practices; and substantial time for questions and answers for workshop participants.

Opportune fulfilled the requirements of the Contract as of August 2, 2019.

## **F.2. AUDIT FINDINGS AND REPORT**

James Fisher, Managing Director from Opportune, provided a summary of the preliminary audit findings to the Land Board in August 2018, followed by a workshop on oil and gas auditing attended by Land Board Staff and IDL Staff. Subsequent to the Land Board meeting, IDL issued a demand letter to Alta Mesa dated September 17, 2018 (**Attachment F**) requesting that Alta Mesa:

- complete an audit of ARM Energy Management LLC (“ARM”) to ensure Alta Mesa was receiving market prices;
- pay \$106.89 for Plant Fuel identified as unpaid;
- pay \$58.61 for royalties unpaid based on Opportune’s reconciliation of volume produced and payments made;
- provide documentation that royalty payments are based on arm’s length transactions; and
- provide detailed plant statements and other documents which would verify royalties paid were based on market pricing.

Alta Mesa failed to respond. Therefore, IDL issued a Notice of Default to Alta Mesa in a letter dated October 26, 2018, with a 90-day date to cure, as required by Idaho Statute 47-809 (**Attachment G**).

Alta Mesa communicated to IDL that it would not conduct an audit of ARM. Alta Mesa did make payment on November 6, 2018 to IDL for the outstanding Plant Fuel royalties (\$106.89) and royalties owed based on the reconciliation efforts of Opportune (\$58.61). On January 18, 2019 and February 7, 2019, Alta Mesa provided the documentation requested by IDL and Opportune. This production occurred after several meetings and communications clarifying the documentation needed by IDL and for Opportune to complete its audit.

During January 2019, Alta Mesa identified and acknowledged that \$48,594.38 in additional royalty payments are owed to IDL for the Original Audit Period timeframe of July 2015 through August 2018. Alta Mesa acknowledged that it incorrectly deducted certain transportation charges of:

- \$5.50 per 42-gallon barrel (“BBL”) for Plant Condensate sold; and
- \$1.50 per thousand cubic foot (“Mcf”) of Residue Gas sold from the ML wells on State Lease O-01996.

On January 18, 2019, Mesa offered IDL a settlement of \$15,000. IDL did not accept the offer.

Opportune reviewed the large data set provided by Alta Mesa in January and February 2019, most notably the Highway 30 Plant settlement statements and multiple sales contracts on the Marketable Products of Residue Gas, Plant Condensate, and NGLs. Opportune also purchased and analyzed an available, reasonably-priced NGL and Residue Gas market Index Price data to fully assess whether the original prices Alta Mesa used for their royalty payments, along with the recognition of erroneously deducted transportation costs, reflected true market prices. Based on Alta Mesa’s offer to include the previously-deducted transportation costs through August 2018, IDL



requested Opportune to include the Supplemental Audit Period of January 2017 through August 2018 in the Original Audit Period of July 2015 through December 2016 in the Audit Report.

The results of Opportune's review of the Audit Period of July 2015 through August 2018 indicates that an additional royalty payment of **\$50,361.57** is owed IDL. This dollar amount also includes adjustments to volumes of some products produced, as identified by the IDL Oil and Gas Division Regulatory staff and discussed in more detail in Section G. below. A copy of Opportune's Audit Report is included as **Attachment H**.

## **G. DEPARTMENT SUMMARY**

### **G.1. PRICE ADJUSTMENTS**

Royalty is paid to the state based on the lease royalty rate (0.125), on mineral estate ownership of the drilling unit (e.g. 40 of 640 acres or 0.0625), and the values for the Marketable Products of Residue Gas, NGLs, and Plant Condensate. The value of each product is determined in relation to contract-defined Index Price, Differential, and allowable deductions. The specific information for these determinations is typically contained in contracts between the producer, processors, transporters, Broker, and Marketer. Many details in these contracts are considered to be trade secrets. Paragraphs below are numbered for ease of reference for the discussion.

#### **G.1.a. Residue Gas**

(1) For the Audit Period, the price shown on the monthly IDL royalty reports for pipeline quality Residue Gas varied from \$0.09 to \$2.10 per million British thermal units ("MMBtu").

(2) AM Idaho provided monthly gas statements, a transportation agreement, and an amendment to a transportation agreement between Northwest Gas Processing (a subsidiary of Alta Mesa) and ARM. These documents show a \$1.50 per Mcf transport fee charged by Northwest Gas Processing for transporting Rich Gas from wellheads through the Little Willow Gathering Facility, through the 11-mile long Rich Gas Pipeline, and through the Highway 30 Plant. This transport fee is disallowed as a deduction.

(3) The \$1.50 per Mcf must be converted on a monthly basis to MMBtu. For each month of the Audit Period, the Highway 30 Plant total delivered volume of Residue Gas in Mcf was divided by the plant total volume of Residue Gas in MMBtu. This ratio was then multiplied by the \$1.50 Mcf fee to provide a monthly transport fee per MMBtu for the particular month. For example, using data from October 2015: 110,440.65 Mcf divided by 141,259.66 MMBtu equals a ratio of 0.782 Mcf per MMBtu. This is multiplied by \$1.50 Mcf and equals \$1.17 MMBtu to be applied to the month of October 2015 only. For the Audit Period, the monthly \$1.50 per Mcf transport fee converted to MMBtu was from \$1.17 to \$1.46 per MMBtu.

(4) During the Audit Period, the price in MMBtu shown on the monthly IDL royalty reports (paragraph 1), plus the converted transport fee in MMBtu (paragraph 3) was from \$1.39 to \$3.38 per MMBtu. Therefore, the total royalty interest owed to the state for the disallowed transport fee levied on Residue Gas is \$36, 284.28.

(5) There are about 40 physical trading locations for Residue Gas in the US. Each location is a distribution hub that records the price paid for actual deliveries at that hub. The price paid is called the Index. Alta Mesa provided monthly trade confirmations between ARM, as Purchaser or Marketer, and Alta Mesa, as seller for Residue Gas based on the contract price point Index called NW. S. of Green River, Rockies (a segment of the northwest pipeline network located south of Green River, Wyoming, of the Rocky Mountain region). For clarity,

this will be referred to as the Rockies Index. The Rockies Index Prices are collected and sold on a subscription basis by Platts Gas Daily of S&P Global, the leading provider of market information. The subscription cost is exorbitant. Therefore, Opportune selected Natural Gas Intelligence (“NGI”) as a proxy to the actual Rockies Index Prices. The use of proxies for comparison purposes is an acceptable practice within the industry. NGI aggregates price data from traders and sellers at various collection points using a multitude of data points for a given location. During the Audit Period, the proxy Index for the Rockies Index lists monthly average values of Residue Gas from \$1.47 to \$3.16 MMBtu. This price represents a reasonable proxy for the Residue Gas Market Price paid by the End Purchaser in an arms-length transaction. Therefore, the total additional royalty interest owed to IDL for the Index Price of Residue Gas is \$2,660.21.

(6) Alta Mesa earlier agreed and then paid \$106.89 for royalty on Plant Fuel volumes during the Original Audit Period. Therefore, Plant Fuel royalty is also owed for the Supplemental Audit Period. Royalty was calculated by taking volumes related to wells on Lease O-01996 and multiplying by the proxy Index for the Rockies Index, without deductions. January 2018 Plant Fuel volumes were not available, and so are not included here. The additional royalty interest owed to IDL during the Supplemental Audit Period for Plant Fuel is \$710.49.

### **G.1.b. Natural Gas (Plant) Liquids**

(1) NGLs are physically traded at only a few locations in the US. The Y-Grade NGL produced by the Highway 30 Plant changes custody once rail cars are loaded at an Ontario, Oregon transloading facility. However, prices are not known until the Y-Grade NGLs are transported to one of four fractionators located at or near Conway, Kansas, where the mixed NGL components are split into the individual purity components of ethane, propane, isobutane, normal butane, and Pentanes Plus. Once fractionated, the individual purity components are then valued using the Conway Index, less a Differential. The Conway Index is readily available through the Oil Price Information Service (“OPIS”) by IHS Markit.

(2) Alta Mesa provided the Northwest Gas Processing Percentage of Proceeds (“POP”) statements for the Audit Period. The POP statements list the Plant Products of NGLs by each component. Each component shows quantity, price, and value. These are the Realized Prices per component from which royalty is paid by taking the total value of all of the summed individual components and dividing by the summed quantity of all individual components.

(3) Alta Mesa provided two third-party contracts for the sale of NGLs to NGL Supply Company, LTD of Calgary, Alberta. The two contracts with NGL Supply are signed by both ARM and Alta Mesa, and contain the following price determination information.

- Contract 1: Effective Date of August 1, 2015 to March 31, 2016; delivery of 630,000 gallons per month; price — OPIS Conway month average per gallon by component, less \$0.45 per gallon per component for clear, conforming, on-spec Y-Grade.
- Contract 2: Effective Date of April 1, 2016 to March 31, 2017; delivery of 750,000 gallons per month; price — OPIS Conway month average per gallon by component, less \$0.3450 per gallon per component for clear, conforming, on-spec Y-Grade.

The Conway Index, less a Differential of \$0.35 to \$0.45 per gallon per component represents the Market Price paid by the End Purchaser in an arms-length transaction (Market Price is called “expected price” by Opportune).

(4) The Market Prices (paragraph 3) were compared to the Realized Prices (paragraph 2) on a monthly basis. In general, the Market Prices were higher by about \$0.10 per gallon per component versus the Realized Prices, except for April of 2016, when the difference was about \$0.17 per gallon per component. This may represent a “scrivener’s error” by Alta Mesa, because April of 2017 was the first month of a new contract. Alta Mesa provided no information to account for these differences between Market Prices and Realized Prices. Therefore, the total royalty interest owed to IDL for this unexplained difference between Market Prices and Realized Prices is \$3,059.80.

### **G.1.c. Plant Condensate**

(1) Plant Condensate prices were determined in relation to the Benchmark price of the monthly average for West Texas Intermediate (“WTI”) crude oil, priced out of the Cushing, Oklahoma storage hub, as agreed-upon within contracts between Alta Mesa and a Utah refinery. During the Audit Period, WTI prices were between \$30.62 to \$70.58 per BBL.

(2) As per contracts, Plant Condensate was valued to the WTI Benchmark price by an agreed-upon Differential. The Differential accounted for several factors of Plant Condensate in comparison to WTI, including: quality characteristics, such as API gravity (density) and potentially paraffin (wax) content; and regional supply and demand conditions, which may have included refinery utilization requirements. During the Audit Period, the Differential resulted in a discount from the WTI Benchmark from \$11.50 to \$12.93 per BBL.

(3) For the Audit Period, as agreed to by multiple contracts, the Utah refinery took custody of the Plant Condensate when each rail car was completely filled at the Ontario, Oregon transloading facility. For each month, the price paid by the Utah refinery was the WTI Benchmark price, less the Differential. This price represents the Plant Condensate Market Price paid by the End Purchaser in an arms-length transaction. During the Audit Period, the monthly prices varied for the Market Price from \$17.94 to \$59.08 per BBL.

(4) For the Audit Period, the price shown on the monthly IDL royalty reports for Plant Condensate varied from \$13.19 to \$50.10 per BBL. These monthly prices were from \$0.33 to \$13.76 less than the Market Price paid by the Utah refinery (paragraph 3). This represents an under-reporting of value by Alta Mesa. The total royalty interest owed to IDL for the under-reported Market Price for Plant Condensate is \$5,992.30 (sum of paragraphs (5) and (6) below). Opportune attempted to understand how this under-reported Market Price was accounted for by Alta Mesa, as summarized in paragraphs 5 and 6.

(5) A transport fee was charged for each barrel of “oil” (Plant Condensate) that was “transported” (processed) by the Northwest Gas Processing Highway 30 Plant (a subsidiary of Alta Mesa). This fee changed multiple times by agreed-to stepped monthly volumes, as shown in the original marketing contract and an amendment between Alta Mesa and ARM. None of these fees were previously included in the monthly Highway 30 Plant statements, nor in the monthly ARM to Alta Mesa statements. The transport fee is disallowed as a deduction. The total royalty interest owed to IDL for the disallowed transport fee levied on Plant Condensate is \$3,932.89.

(6) In general, even after accounting for the transport fee (paragraph 5), an unexplained difference remains between the monthly Market Price paid by the End Purchaser for Plant Condensate (paragraph 3), less the disallowed transport fee. The total royalty interest owed to IDL for this unexplained difference on Plant Condensate is \$2,059.41.

(7) The \$3,932.89 disallowed transport fee (paragraph 5) plus the unexplained remaining difference of \$2,059.41 (paragraph 6) equals the under-reported Market Price for Plant Condensate of \$5,992.30 (paragraph 4).

## G.2. VOLUME ADJUSTMENTS

In 2018, the Idaho Oil and Gas Conservation Commission noted discrepancies in volumes reported by Alta Mesa for Residue Gas and Plant Condensate allocated back to some individual wells that produced from the Willow Field. The individual well completions were allocated their shares of hydrocarbon products (Residue Gas, NGLs, and Plant Condensate) produced by the Highway 30 Plant by a one-, two-, or three-step allocation method. The allocation methods differ in the number of steps because of various technical, operational, or financial constraints associate primarily with the location of each well in relation to the production processes. Each individual step in the allocation process uses the molecular percentages of hydrocarbon components derived from multiple laboratory analyses that are used to scale the contributions of each well completion to the total of each product.

Alta Mesa was informed of the discrepancies and discovered a systematic error in one of several equations used in some steps of the allocation process for individual hydrocarbon components. The error affected the volumes of Plant Condensate allocated to the gas and liquid streams leaving the Little Willow Facility and entering the Highway 30 Plant. Allocations of NGLs were not affected by the error. The error was a mismatched stream analysis reference within one equation used to allocate Plant Condensate.

- The incorrect reference applied the equivalent liquid volume percentage of each individual hydrocarbon component derived from each laboratory analysis.
- The correct reference applied the molecular percentage of each individual hydrocarbon component derived from each laboratory analysis.

Below is a textbook example laboratory hydrocarbon analysis data table of chromatographic results using test method GPA 2186M<sup>6</sup>. It lists the “Mole %” (molecular %) and the “Liq. Vol. %” (liquid volume percent) for 21 components. Highlighted in yellow are the Mole % and the Liq. Vol. % for methane. Note the difference in percentages for methane. Differences also occur for the other individual components.

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<sup>6</sup> Hutchinson, B., 2013. Analysis of Gas Liquids by GPA 2186. Agilent Technologies Application Note, 14 pages.

Components	Mole %	Weight %	Liq. Vol. %
Carbon Dioxide.....	0.0853	0.1450	0.0687
Nitrogen.....	0.0281	0.0304	0.0146
Methane.....	64.2964	39.8359	51.4398
Ethane.....	14.4191	16.7445	18.1980
Propane.....	11.9911	20.4207	15.5901
iso-Butane.....	2.5568	5.7392	3.9483
n-Butane.....	3.8382	8.6156	5.7104
iso-Pentane.....	0.9367	2.6100	1.6166
n-Pentane.....	0.9036	2.5178	1.5457
Cyclopentane.....	0.0519	0.1405	0.0725
n-Hexane.....	0.2551	0.8490	0.4950
Cyclohexane.....	0.0463	0.1505	0.0743
Other Hexanes .....	0.2743	0.9130	0.5324
Heptanes.....	0.0865	0.3347	0.1883
Methylcyclohexane.....	0.0301	0.1141	0.0571
2,2,4-Trimethylpentane...	0.0951	0.4195	0.2332
Benzene.....	0.0247	0.0745	0.0326
Toluene.....	0.0104	0.0370	0.0164
Ethylbenzene.....	0.0007	0.0029	0.0013
Xylenes.....	0.0062	0.0254	0.0113
C8+ Heavies.....	0.0634	0.2797	0.1533
Totals .....	100.0000	100.0000	100.0000

On April 1, 2019, IDL's Oil and Gas Division received several allocation datasets produced for Alta Mesa by a contract petroleum engineer. These datasets contain: the monthly results and yearly summations of the original allocation method and the corrected allocation method; and the difference between the two methods. IDL analyzed the datasets and created its own summations which confirmed the Plant Condensate volumes and Residue Gas volumes using both methods. IDL also determined the volume differences between these methods to individual well completions and summed the grand totals for the Willow Field production based on each method.

IDL determined that the new corrected volume allocations are consistent to the original allocation results, with reasonable differences by well completion explained by the error introduced from the mismatched stream analysis reference within one of the allocation equations for Plant Condensate.

Wells on State Lease O-01996 showed the following minor volume differences between original and corrected allocation methods.

- ML 1-10: -5 BBL difference in Plant Condensate, and -28 MMBtu difference in Residue Gas volumes
- ML 2-10: +1,937 BBL difference in Plant Condensate, and +3,325 MMBtu difference in Residue Gas volumes.
- ML 3-10: +1, 148 BBL difference in Plant Condensate, and + 3,349 MMBtu difference in Residue Gas volumes.

These changes in Plant Condensate and Residue Gas volumes from the corrected allocations were used by Opportune. They calculated additional royalty interest owed to IDL by Alta Mesa for the Market Prices for the additional Plant Condensate and Residue Gas as \$1,074.49.

## I. CONCLUSIONS

The results of Opportune's review of the Audit Period of July 2015 through August 2018 indicate that an additional royalty payment of **\$50,361.57** is owed IDL. This amount is the sum of the additional royalty payments from the following categories (Report page numbers in parenthesis):

### **Residue Gas:**

- \$36,864.28 for the \$1.50/MCF transport charge improperly deducted from sales (pages 13-14).
- \$2,660.21 for additional royalty interest based on the Index Price (page 14).
- \$710.49 for Plant Fuel deducted during the Supplemental Audit Period (page 14).

### **Natural Gas Plant Liquids:**

- \$3,059.80 for the unexplained difference between Market Prices and Realized Prices (page 15).

### **Plant Condensate:**

- \$3,932.89 for the \$5.50/BBL transport charge improperly deducted from sales (pages 15-16).
- \$2,059.41 for the unexplained difference between Market Prices and Realized Prices (page 16).

### **Volume Reallocation:**

- \$1,074.49 for changes in Plant Condensate and Residue Gas volumes from the corrected allocations calculated from the Market Prices (pages 16-17).

Based on the information contained within this report and its attachments, which includes Opportune LLP's Audit Report, IDL has concluded that Alta Mesa is in default of the terms of the State of Idaho Oil and Gas Lease Nos. O-01983 and O-01996 and owes the Idaho Department of Lands payment in full for royalties identified above. Additional payments including, but not limited to, interest; late fees; and administrative costs may also be required to return Alta Mesa from the "in default" status to the "in good standing" status with these two oil and gas leases.

## J. ATTACHMENTS

- A** Glossary of Terms
- B** Location Map
- C** Simplified Conceptual Diagram of the Process Flow Stream – ML Investments Wells
- D** Simplified Conceptual Diagram of the Process Flow Stream – State 1-17
- E** Scope of Work - Audit Contract
- F** Demand Letter - September 17, 2018
- G** Notice of Default - October 26, 2018
- H** Opportune Audit Report

# **ATTACHMENT A**

## **GLOSSARY OF TERMS**

## GLOSSARY OF TECHNICAL TERMS

**Allocation** is a term used to describe the system by which ownership of oil, gas, and produced water is determined and tracked from the point of production to a point of sale or discharge. Allocation is also known as: hydrocarbon accounting; hydrocarbon value realization; product measurement and allocation; and production management and reporting. Although the principles of allocation are straightforward, the details are highly complex.

**Alta Mesa** means Alta Mesa Holdings, LP or its subsidiaries.

**AM Idaho** means AM Idaho LLC, listed as an Idaho Foreign Limited-Liability Company with a principal address is 15021 Katy Freeway, 4th Floor, Houston, TX 77094. During the Audit Period, AM Idaho was the operator of wells in the Willow and Hamilton fields.

**ARM** means Arm Energy Management, LLC, a midstream services firm for physical marketing and financial hedging of hydrocarbons. In February 2018, ARM announced that the Company and its partners sold Kingfisher Midstream, LLC (“Kingfisher”) to Silver Run Acquisition Corporation. ARM formed Kingfisher in September 2015 in partnership with HPS Investment Partners. The company is now named Alta Mesa Resources, Inc. The management teams of Riverstone and Alta Mesa collectively own about 33% of the market capitalization of Alta Mesa Resources, while Kingfisher equity holders own 14%.

**Audit Period** means the timeframe of August 2015 through August 2018. It includes the Original Audit Period of August 2015 through December 2016, plus the amended additional timeframe of January 2017 through August 2018.

**Benchmark** means a price of a specific crude oil stream at a specific location. There are almost 200 benchmark crude streams produced around the world. Each stream has a unique quality specification, particularly in reference to density and sulfur content. Benchmark prices always reflect a specific point of sale, and will therefore be priced differently at different locations. There are three variables that drive price differences between the different benchmarks: (1) Quality, which is mostly defined by API Gravity and sulfur content, but can also be affected by impurities, molecular structure, and acidity of the crude oil; (2) Marketability, as governed by supply and demand fundamentals that include how much of a specific crude is produced, how many customers are willing to process that crude, and where those processing customers are located; and (3) Logistics, which refers to available infrastructure and transportation methods used to get a specific crude from the producer to its processing customer.

**Broker** means an agent or facilitator who acts as an intermediary on behalf of energy producers by finding and selling to energy consumers. Alternately, Brokers may sell to any party in the supply chain who is downstream from the producer. They earn their profit based on a markup added to the price of the product when it is sold to a Purchaser. A Broker never assumes title to the energy they are selling and they might transact business on behalf of the seller, the buyer, or both parties. Marketers and Brokers may also assist the customer with aggregation, firming, and arrangement of ancillary services.

**BTU** means the energy per unit volume represented by the number of British Thermal Units (BTU) produced by the complete combustion of one standard cubic foot of a gas (excluding hydrogen sulfide) at a temperature base of sixty degrees Fahrenheit and pressure base of 14.65 pounds per square foot



absolute (psia) (the 14.65 pressure base is the Gas Processors Association standard used to determine the Gross Heating Value of a gas, and is not to be confused with the gas volume correction factor that uses a pressure base for measuring gas of 14.73 psia).

**Condensate** is a generic term and means undifferentiated hydrocarbons that are liquid at the temperature and pressure at which it is measured. Condensate also means the liquid produced by the condensation of a vapor or gas either after it leaves the reservoir or while still in the reservoir (47-310(3)).

**Conway** means an area and NGL market about 25 miles northwest of Wichita, KS, which contains: an interconnected system of storage caverns hosted in salt; four Fractionators (Bushton, Conway-McPherson, Hutchison – all in KS, and Medford, OK); pipelines bringing mixed NGLs in for processing; pipelines moving purity products out; and rail racks for moving product in and out.

**Crude Oil** means a mixture of raw liquid hydrocarbon components, the majority of which range from the pentanes and heavier hydrocarbon components recovered after the wellhead by gravity separation or a similar process, and is liquid at the conditions under which its volume is measured or estimated. Crude Oil includes Well Condensate, but does not include Plant Condensate. There is no scientifically-defined demarcation between crude oil and well condensate. Crude oil is normally less than 40 degrees of API gravity.

**Differential**, also called the basis differential, means, in simple terms, the difference between the price of an energy commodity in one market and the price of an energy commodity in a different market. The different “market” can be: (1) a different location, also known as locational basis (for example, Idaho Plant Condensate vs. Utah refineries); (2) a different product or quality, also known as a product or quality basis (for example, Idaho Plant Condensate vs. WTI Crude Oil); or (3) a different time frame, also known as a “calendar basis” (for example, November NYMEX WTI Crude Oil futures vs. a November NYMEX WTI calendar swap).

**Drilling Unit** means the IDL-defined area for oil and gas wells to be drilled that helps prevent the waste of oil and gas, avoids drilling of unnecessary wells, or protects correlative rights (47-317). The wells which are the subject of this report are located on 640 acre drilling units.

**End Purchaser** means a third-party, arms-length purchaser of oil, gas or condensate that is ready for refining or other use, or a third-party, arms-length purchaser of other fluid or gaseous hydrocarbons that have been separated in a processing facility (47-310 (6)).

**Ethane Cracker** means a highly-specialized petrochemical plant that takes ethane and “cracks” the molecular bonds to produce ethylene, a feedstock for polyethylene plastics and other products. A new ethane cracker is under construction in western Pennsylvania at an estimated cost of \$6 billion.

**Expected Price** means the term Opportune uses for Market Value.

**Field** means an area of land underlain by strata yielding petroleum in amounts that justify commercial exploitation.

**Fractionator** means an industrial process plant that processes undifferentiated NGL streams into individual purity products. The undifferentiated NGL stream itself has no commercial value because it

cannot be used in any industrial application as is. Only the individual purity products are useable, which is why they are separated with fractionation. NGL fractionation contracts are typically fee-based, and depend on the volume of NGLs fractionated.

**Gas Daily** means the Index Prices for Residue Gas sold at different hubs, and available on a subscription basis by Platts Gas Daily of S&P Global, the leading provider of energy market information.

**Gas Processing Plant** means an industrial process plant that takes in Rich Gas, and typically removes water, CO<sub>2</sub>, sulfur, and other contaminants, and then separates methane and ethane from the other NGLs by using powerful compressors and chillers that cool the Rich Gas to cryogenic temperatures (approx. -120°F). The methane, and some or most of the ethane are combined to make Residue Gas with a heat content range within pipeline specifications. Extracted NGLs are then sold at prices higher than those they would receive if marketed at their natural gas heat value. The mixed stream of Y-Grade NGLs are then transported to a Fractionator for separation into purity products, because the Y-Grade NGL stream itself has no commercial value. The Highway 30 Plant also takes in Well Condensate, which must be processed to remove enough of the lighter components to meet highway or rail shipment standards for volatility. Once “stabilized,” the Well Condensate is called Plant Condensate.

**Gathering Facility** means an industrial process plant that: receives gathering lines from wells; uses gravity methods to separate well fluids into liquid hydrocarbons, gaseous hydrocarbons, and produced water; commingles these three separated streams; separately processes the comingled liquid and gaseous hydrocarbon streams; and then sends the two separate hydrocarbon streams to a Gas Processing Plant.

**High Mesa** means High Mesa Services, LLC, and is an Idaho Foreign Limited-Liability Company filed on November 14, 2014. The company's principal and mailing address is 15021 Katy Freeway 4th Fl, Houston, TX 77094. These are the identical addresses listed for Alta Mesa, AM Idaho, and Northwest Gas Processing.

**Index** means the name of the physical trading hub and its recorded prices paid over time for actual deliveries of Residue Gas or NGLs.

**Index Price** means the daily or monthly price paid for actual deliveries of Residue Gas or NGLs at physical trading hubs in the US.

**Lease Condensate** means condensate produced on or near the lease, and is a term used interchangeably with the term Well Condensate, prior to the condensate being processed at a Gathering Facility.

**Marketer** means an agent or facilitator who acts as an intermediary on behalf of energy producers by finding and selling to energy consumers. Alternately, marketers may sell to any party in the supply chain who is downstream from the producer. Marketers assume title to the commodity they trade, either by purchasing the commodity, or by acting on the producer's behalf. They earn their profit based on a markup added to the price of the product when it is sold to a customer. In contrast, a Broker never assumes title to the energy they are selling, but they may transact business on behalf of the seller, the buyer, or both parties. Marketers and Brokers may also assist the customer with aggregation, firming, and arrangement of ancillary services.

**Market Value** means the price at the time of sale, in cash or on terms reasonably equivalent to cash, for which the oil and gas should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus from either party. The costs of marketing, transporting and processing oil and gas produced shall be borne entirely by the producer, and such cost shall not reduce the severance tax directly or indirectly (47-310 (11)).

**MCF** (or Mcf) means one thousand cubic feet of gas at standard base conditions of 60°F and 14.73 psia.

**MMBTU** (or MMBtu) means one million British Thermal Units (BTU). The BTU is a traditional unit of heat, defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

**Natural Gas Intelligence** (NGI) means a leading provider of natural gas market data to the energy industry. NGI aggregates price data from traders and sellers at various collection points using a multitude of data points for a given location. In this report, NGI prices are used as a proxy for the actual Rockies Index prices.

**Natural Gas (Plant) Liquids** means hydrocarbon compounds in Rich Gas that are extracted as liquids at processing plants, Gas Processing Plants, gas plants, gasoline processing plants, fractionating plants, cryogenic plants, and cycling plants. Plant products of Natural Gas Plant Liquids may include ethane, propane, the butanes, the pentanes, and hydrocarbon compounds of higher molecular weight. Hydrocarbon components may be fractionated and sold as an individual hydrocarbon (such as propane), or mixed together and sold mixtures called Plant Products, depending on the purchaser's sales agreement. Plant Product types include the following mixtures: Y-Grade mix (ethane plus higher molecular weight hydrocarbon components); EP mix (ethane plus propane); LPG mix (propane plus butane); BG mix (butane plus "gasoline"), and P plus mix (pentanes plus heavier hydrocarbon components, also called "natural gasoline").

**Net Revenue Interest** (NRI) means the royalty revenue calculated from a mineral estate, based on the mineral estate acres owned within a Drilling Unit, multiplied by the lease royalty rate. For example, the NRI for the three ML Investments wells is calculated by dividing 40 acres of state mineral estate ownership by the 640 acre Drilling Unit ( $40/640 = 0.0625$ ), and then multiplying the ownership fraction of 0.0625 by the lease royalty rate of 0.125. This provides a NRI of 0.0078125 for the state ownership of mineral estate drained by each ML Investments well.

**Northwest Gas Processing** means the owner of the Highway 30 gas processing plant located at 4201 US Highway 30, New Plymouth, ID. It is listed as a privately-held, Idaho Foreign Limited-Liability Company, filed on November 14, 2014. The company's principal address and mailing address is 15021 Katy Freeway, 4th Floor, Houston, TX 77094. This is the identical address for Alta Mesa ("attention M. Phillips of Alta Mesa" on agreements), with billing inquiries directed to revenue accounting of Alta Mesa, and with contracts signed by H. Chappelle, president of both Northwest Gas Processing and Alta Mesa.

**NYMEX** (New York Mercantile Exchange) price means, as of the date of the determination thereof, with respect to each of the appropriate crude oil or natural gas categories included, the prices for the 36 succeeding monthly futures contract prices (the "3 Year Strip") and held constant thereafter based on the price of the average of the contract prices for the last twelve (12) months of such 3-Year Strip

period, commencing with the month during which the determination is to be made, as quoted on the NYMEX and published in a nationally-recognized publication for such pricing.

**Oil Refinery** means an industrial process plant that primarily processes crude oil into more valuable refined products. These refined products are known as refinery cuts, petroleum products, or simply products. They are more valuable than the crude oil as they are readily used as a fuel source (or feedstock) in all types of industries. An oil refinery is a part of the midstream sector of the oil and gas industry. Refineries house a large number of chemical engineering unit processes which are useful in converting raw crude oil into useful and valuable petroleum products. The following are some of the petroleum products obtained when crude oil is fed into a crude distillation unit, which is the first processing unit of a refinery: liquified petroleum gas, naphtha, gasoline, kerosene (as well as varieties of jet fuel), diesel, fuel oil, lubricating oil, and bitumen (paraffin wax, asphalt, tar, coke).

**OPIS (Oil Price Information Service) Index Price** means the monthly average of the daily high and low of NGL prices per gallon, for the month in which delivery occurs, as quoted by OPIS in the OPIS LP-Gas Report. OPIS collects data for almost 60 price points for NGL throughout North America, including the key Mont Belvieu and Conway hubs.

**Original Audit Period** means the timeframe of August 2015 through December 2016, as defined in the scope of work and subsequent contract for the audit.

**Pentanes Plus**, also called P-plus and natural gasoline, means hydrocarbon components of the pentanes, plus heavier hydrocarbon components extracted from Well Condensate and Rich Gas at processing plants, Gas Processing Plants, gas plants, gasoline processing plants, fractionating plants, cryogenic plants, and cycling plants.

**Percentage of Proceeds (POP)** means a type of contract used by gas processors where the producer and processor share value of the actual proceeds of the sale of Residue Gas and NGLs, or an agreed-upon percentage based on index prices for the commodities (also called "percentage of index" or POI). A processors POP statements list the Plant Products of NGLs by each component. Each component shows quantity, price, and value. These are the Realized Prices per component from which royalty is paid by taking the total value of all of the summed individual components and dividing by the summed quantity of all individual components.

**Plant Condensate** is also referred to as stabilized condensate and means the processed liquid hydrocarbon product from a processing plant. The processing decreases the quantity of methane and ethane, which reduces the vapor pressure of the liquid, thereby preventing the production of vapor phase upon flashing the liquid, which ensures safe storage in atmospheric transportation and storage tanks.

**Plant Fuel** means Residue Gas used as fuel in Gas Processing Plants to power heaters, dehydrators, and compressors.

**Plant Products** means the component NGLs produced as a Y-Grade mix at a Gas Processing Plant, along with: their allocated and settled quantities on a per well basis; the price per gallon of the individual components; the total quantities of the summed components; and the total value of the summed components.

**Produced Water** means water in an underground formation that is brought to the surface during oil and gas production as a byproduct, along with the oil and gas. Produced water is typically gravity separated and measured at or near the wellhead. Produced water is also referred to as formation water, or interstitial water, but formation water may not have been the water present when the rock originally formed. Produced water may include connate water (or fossil water), which is the water trapped in the rock spaces during its formation. Produced water is classified as an “exempt” oil and gas waste stream, meaning it is not subject to the Subtitle C (hazardous waste) provisions of the Resource Conservation and Recovery Act. Produced water from Willow Field is disposed of offsite as a wastewater.

**Purchaser** is a general term that means a purchaser of oil, gas or condensate, or a purchaser of other fluid or gaseous hydrocarbon components.

**Residue Gas**, also referred to as tailgate gas, burner gas, or pipeline-quality natural gas, as measured in thousand cubic feet (MCF), means a processed gas consisting of 87.0 - 97.0 molecular percentage of methane that is merchantable and marketable, and meets an interstate or intrastate transmission company’s minimum specifications with respect to: (i) delivery pressure; (ii) delivery temperature; (iii) BTU content; (iv) mercaptan sulfur; (v) total sulfur; (vi) moisture or water content; (vii) carbon dioxide; (viii) oxygen; (ix) total inert components (the total combined carbon dioxide, helium, nitrogen, oxygen, and any other inert component percentage by volume); (x) hydrocarbon dew point limits; (xi) merchantability; (xii) content of any liquids at or immediately downstream of the delivery point into a pipeline; and (xiii) interchangeability with the typical composition of the gas in the pipeline with respect to the following indices: Wobbe Number, Lifting Index, Flashback Index, and Yellow Tip Index per American Gas Association Bulletin No. 36.

**Realized Price** means the price per individual NGL component at the end of the process stream at a Gas Processing Plant. It is calculated as the Index Value (for example, the Conway Index) minus transportation costs from Gas Processing Plant to Fractionator, and minus fractionation costs at one of the Conway Fractionators. The transportation and fractionation costs are typically known as the “T&F” adjustment.

**Rich Gas** means all hydrocarbon compounds and gaseous substances in a raw, unprocessed liquids-rich gas (minus formation water) that is gaseous at the conditions under which its volume is measured or estimated. Rich Gas is typically recovered from the wellhead or at the surface by use of a gravity separator or similar equipment. Rich Gas typically consists mostly of methane, ethane, propane, the butanes, and minor amounts of the pentanes plus hydrocarbon compounds of higher molecular weight.

**Supplemental Period** means the extended audit period of January 2017 through August 2018.

**Three-Phase Separator** means a processing system commonly used in the oil and gas industry for the separation by density contrasts of oil, water, and hydrocarbon gases from raw product streams.

**Well Condensate** means undifferentiated crude oil or condensate as a mixture of raw liquid hydrocarbon components, the majority of which range from pentanes and hydrocarbon compounds of higher molecular weight recovered after the wellhead by gravity separation or a similar process, and is liquid at the conditions under which its volume is measured or estimated. Well Condensate (also called lease condensate) can be derived directly after the wellhead with no separation (historically called casinghead gasoline). Well Condensate is typically unstable for truck transport and must be processed

at a specialized facility to remove specific hydrocarbon compounds or various impurities; it is then referred to as Plant Condensate.

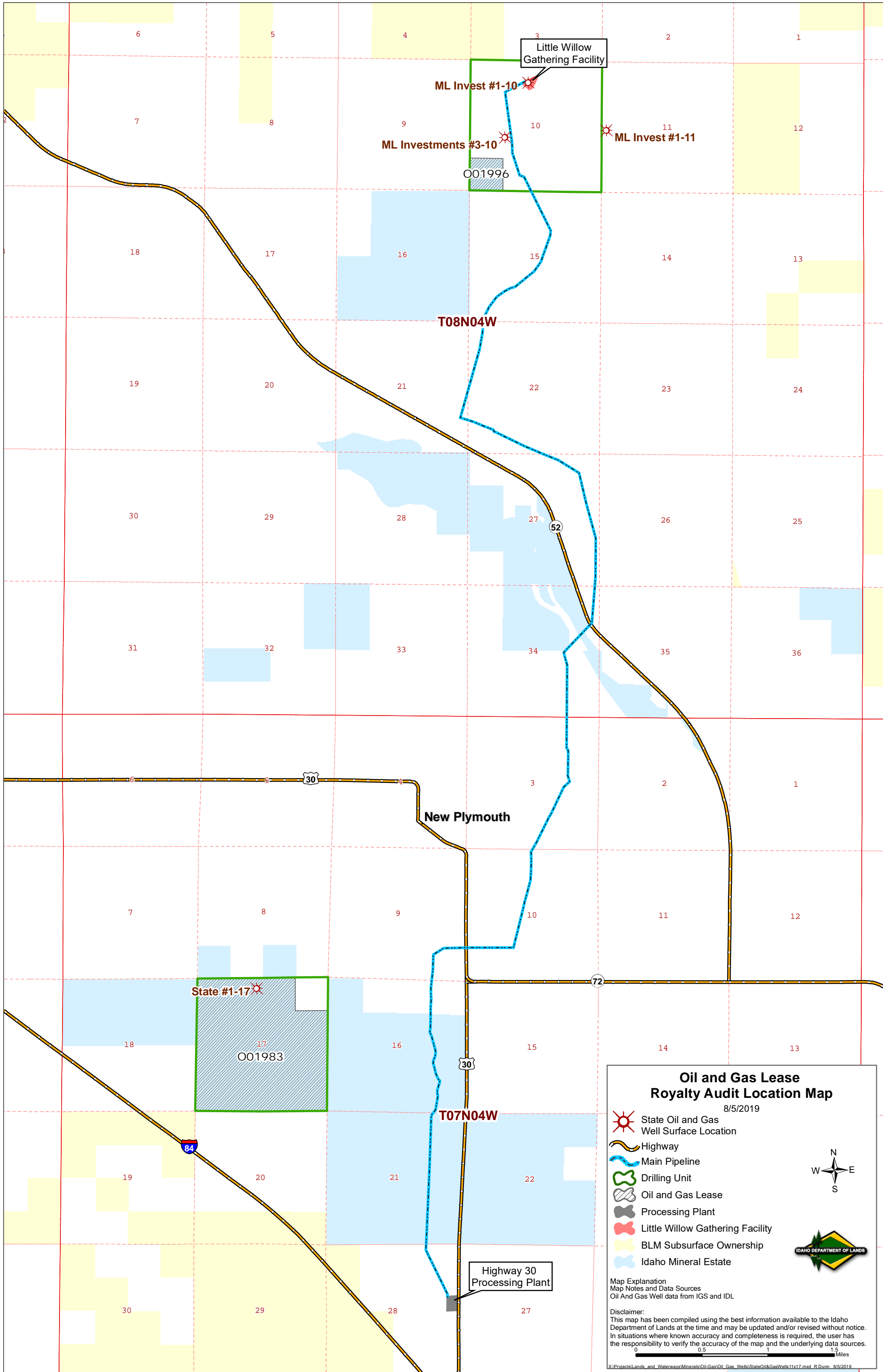
**Weiser-Payette Basin** means a subsurface sedimentary basin in the Weiser to Payette area that at one time was a low area in the Earth's crust into which sediments accumulated.

**West Texas Intermediate (WTI)** means a crude oil that is the most commonly used Benchmark form which to value other crude oils in the US. There are over 200 different crude oils traded on exchanges (<https://oilprice.com/oil-price-charts#prices>). Other crude oils are valued from the WTI price by a Differential. The price settlement point for WTI is at Cushing, Oklahoma because of the dozens of intersecting pipelines, many storage facilities, and easy access to refiners and suppliers. WTI is a light, sweet crude oil with an API gravity of about 40, and a sulfur content of about 0.3%.

**Y-Grade**, also referred to as raw mix and raw make, means the mixed NGL stream produced at a Gas Processing Plant. The Y-Grade NGL stream itself has no commercial value, because it cannot be used in any industrial application. The story is that Y-grade got its name from an old Texas pipeline company that assigned different letters to the various products that they shipped.










**ATTACHMENT B**

**LOCATION MAP**



### Oil and Gas Lease Royalty Audit Location Map

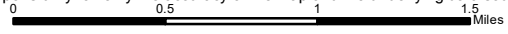
8/5/2019

-  State Oil and Gas Well Surface Location
-  Highway
-  Main Pipeline
-  Drilling Unit
-  Oil and Gas Lease
-  Processing Plant
-  Little Willow Gathering Facility
-  BLM Subsurface Ownership
-  Idaho Mineral Estate



Map Explanation  
 Map Notes and Data Sources  
 Oil And Gas Well data from IGS and IDL

Disclaimer:  
 This map has been compiled using the best information available to the Idaho Department of Lands at the time and may be updated and/or revised without notice. In situations where known accuracy and completeness is required, the user has the responsibility to verify the accuracy of the map and the underlying data sources.



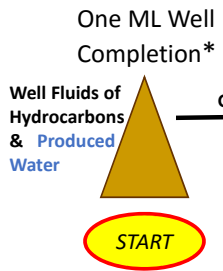


## **ATTACHMENT C**

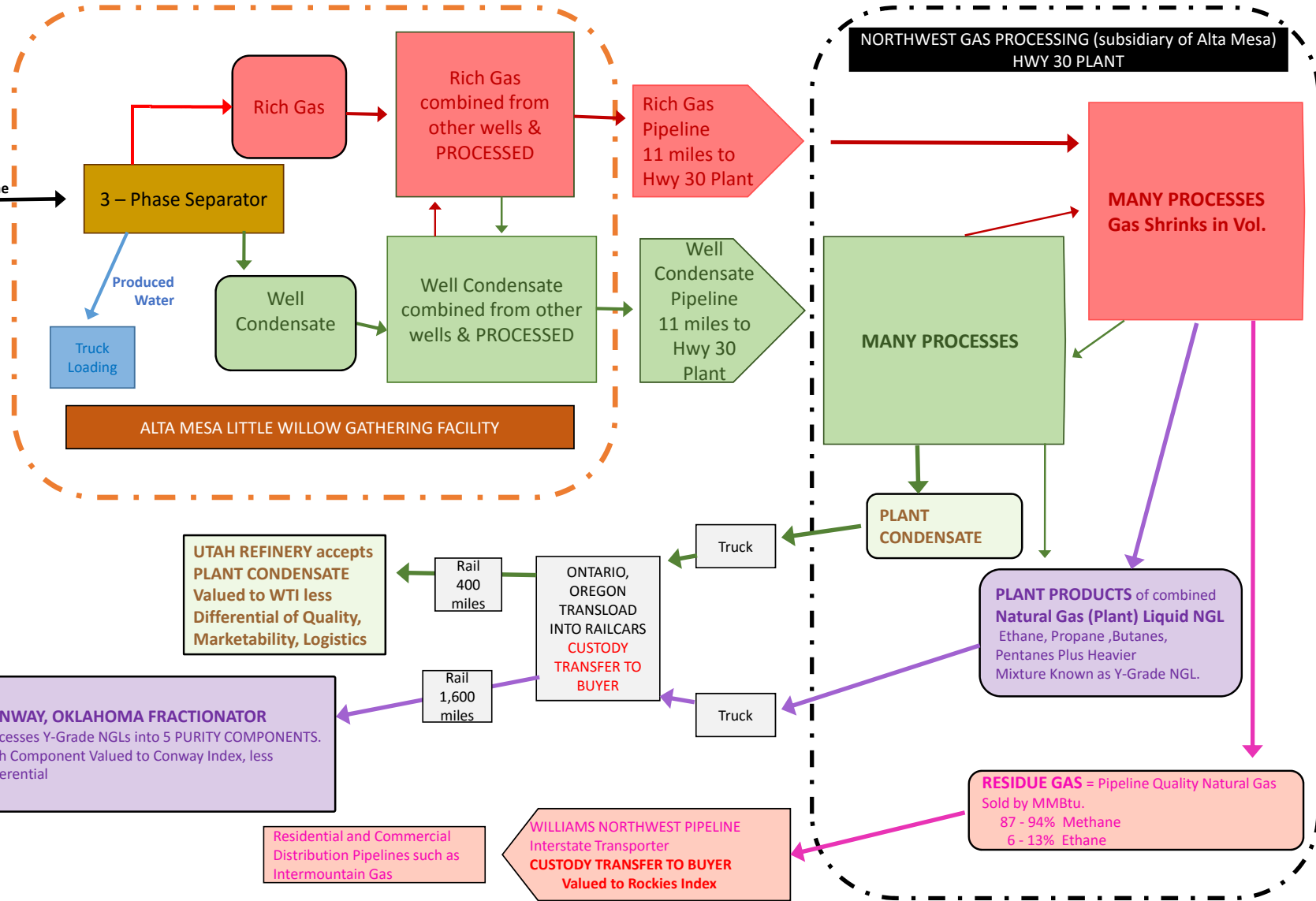
# **SIMPLIFIED CONCEPTUAL DIAGRAM OF THE PROCESS FLOW STREAM**

## **ML INVESTMENT WELLS**

**ATTACHMENT C: Simplified Conceptual Diagram of the Process Flow Stream, ML Investments Wells**



\*There are 3 ML wells on the 640 acre drilling unit, of which Idaho owns 40 acres of the mineral estate.

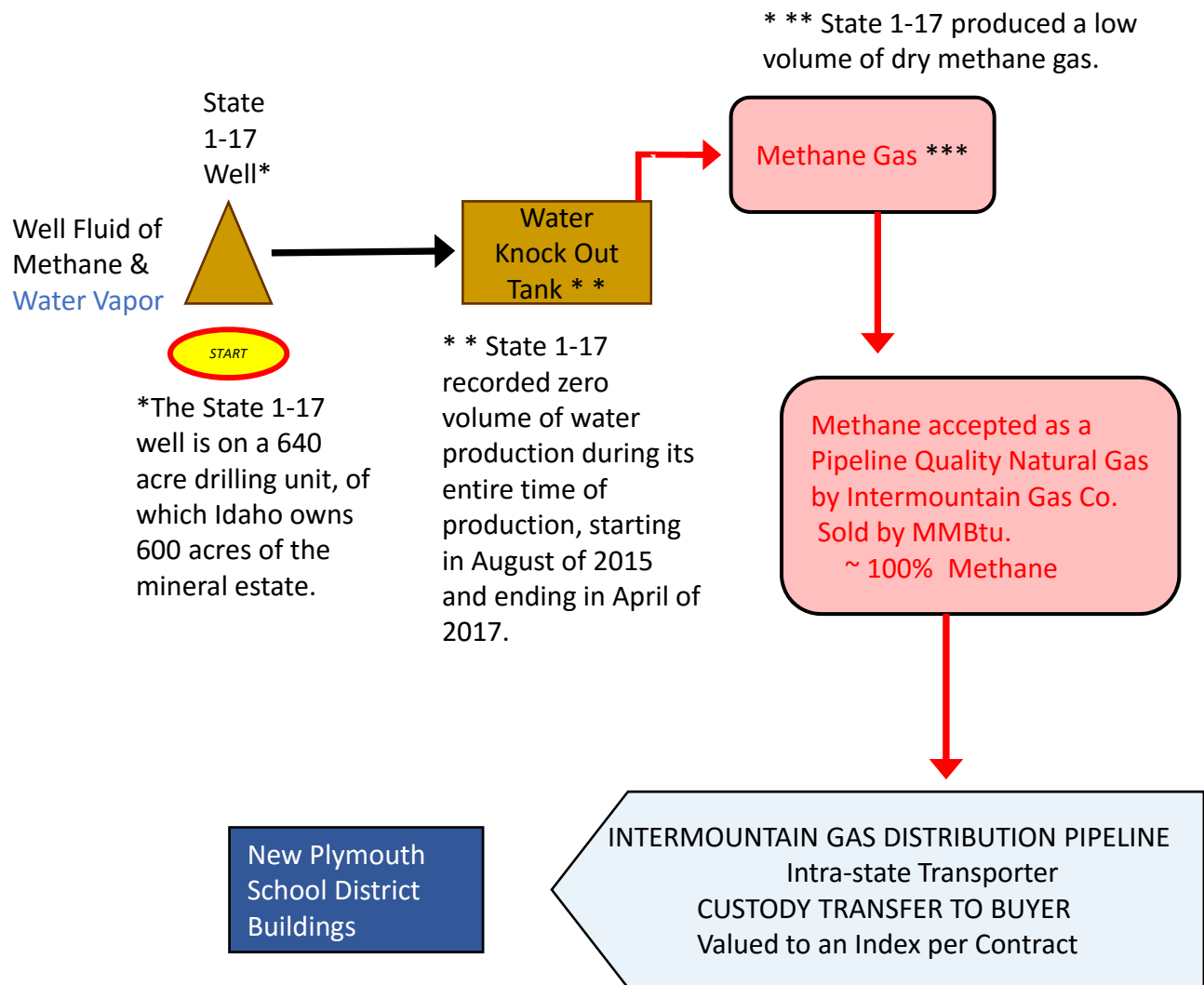


Ethane, Propane, Isobutane, Normal Butane, Pentanes Plus each stored in separate Conway Salt Domes or run into separate purity product pipelines to petrochem plants. Example: Ethane piped to ExxonMobil Baytown Ethane Cracker in Mont Belvieu, Texas to process into Ethylene for Polyethylene Plastics.

## **ATTACHMENT D**

# **SIMPLIFIED CONCEPTUAL DIAGRAM OF THE PROCESS FLOW STREAM**

**STATE 1-17**



**ATTACHMENT D: Simplified Conceptual Diagram of the Process Flow Stream, State 1-17 Well**

# **ATTACHMENT E**

## **SCOPE OF WORK – AUDIT CONTRACT**

## 3.0 SCOPE OF WORK

**PROJECT NAME:** Oil and Gas Auditing Services

**LOCATION:** Boise, ID

### OVERVIEW

The Idaho Department of Lands (IDL) requires professional auditing services necessary to assess whether royalties paid to IDL for oil and gas produced during the audit period of August of 2015 through December of 2016 from three wells under two state leases were in compliance with the terms of:

- Idaho Statute - Title 47 Mines and Mining - Chapters 3 Oil and Gas Wells,
- Idaho Statute - Title 47 Mines and Mining – Chapter 8 Oil and Gas Leases on Sate and School Lands;
- IDAPA 03.16 20.03.16 - Rules Governing Oil and Gas Leasing on Idaho State Lands; and
- Lease agreements O-01983 and O-01996.

The contracted auditor (Auditor) will provide services on behalf of IDL, and may have access to confidential systems and information not available to the public. As such, all records and reports will remain the property of IDL or the state agency where such information resides.

### General Information

The Auditor will perform a limited oil and gas lease audit of royalties paid to IDL from August of 2015 through December of 2016 including: an analytical review of volume and payment reconciliations; an assessment of identified arms-length transactions; and documentation of any significant findings that may warrant further investigation. Currently, one operator (Operator) submits royalty reports and payments for the three producing wells under two state leases.

Well Name	Field	State Royalty Interest	Total Production Timeframe	Products <sup>1</sup>	TOTAL BOE <sup>2</sup> FY2016 <sup>3</sup>
ML Investments 1-10	Willow	0.0078125	Aug. 2015 - Jan 2016 <sup>4</sup>	C, P, RES	58,000
ML Investments 2-10	Willow	0.0078125	Aug. 2015 - present	C, P, RES	174,000
State 1-17	Hamilton	0.1171875	Aug. 2015 - present	G	1,300

<sup>1</sup> Product Codes:  
 C = Condensate  
 P = Natural Gas Plant Liquids  
 RES = Pipeline-Quality Natural Gas  
 G = Non-Processed Gas

<sup>2</sup> Barrel of Oil Equivalent (BOE) is approximately 5.8 MMBtu per one barrel (42 U.S. gallons) of crude oil. The BOE combines production into a single measure for generalized comparison purposes only.

<sup>3</sup> FY2016 = July 2015 - June 2016

<sup>4</sup> shut in since Feb 2016

IDL has assembled 15 audit review documents. Documents 1-8 are included in this request as Attachment 1. Documents 9-15 will be forwarded to the auditor selected for these services. Additional

severance tax information may be available from the Idaho State Tax Commission, and audit information may be available from the U.S. Department of Interior Office of Natural Resources Revenue.

**List of Documents from IDL for Audit Review (documents 1-8 attached)**

1. Southwestern Idaho Natural Gas Play, Idaho Geological Survey, 2014
2. Idaho Statute - Title 47 Mines and Mining - Chapters 3 Oil and Gas Wells  
Statute in effect for the audit period
3. Idaho Statute - Title 47 Mines and Mining – Chapter 8 Oil and Gas Leases on Sate and School Lands  
Statute in effect for the audit period
4. IDAPA 03.16 20.03.16 - Rules Governing Oil and Gas Leasing on Idaho State Lands;  
Rules in effect for the audit period
5. Lease O-01983
6. Lease O-01996
7. IDL Oil & Gas Royalty Report  
This is the blank form that contains the following tabs: Summary Sheet, Data Form, Field Descriptions, and Product Definitions
8. Idaho Oil and Gas Conservation Commission Monthly Production Report Form  
This is the blank form for production information submitted to the newly-created Oil and Gas Regulatory Division within IDL

(Documents 9-15 are not included in this Request for Proposal due to their potential exemption from the Idaho Public Records Act. After award of the contract, Auditor will be required to sign a confidentiality agreement, and Documents 9 through 15 will be forwarded to the Auditor.

9. Production and Process Schematic Diagram (s).pdf
10. Individual Monthly Royalty Reports, 3 State wells.xls
11. Royalty Report Summary Table for all 3 State wells.xls
12. Royalty Report Summary Table for well State 1-17 on State Lease 1983.xls
13. Royalty Report Summary Table for well ML Investments 1-10 on State Lease 1996.xls  
Shut-in since Feb. 2016
14. Royalty Report Summary Table for well ML Investments 2-10 on State Lease 1996.xls

## 15. Production Report Summary Table.xls

This spreadsheet contains compilations of production information for each well as separate tabs

### **SCOPE OF WORK:**

IDL will complete the following three tasks upon delivery of the Notice to Proceed to the Auditor.

#### **Document/Data Exchange and Pre-Audit Conference:**

1. IDL will schedule a meeting with the Auditor to review the contract scope of services, period of performance, documents to be reviewed, work products to be developed, scheduling and coordination with the Operator, and other relevant topics.
2. IDL will provide to the Auditor relevant information about the Operator, such as office address, audit contact, key personnel, and other background information.
3. IDL will provide Documents 9-15 to the Auditor.

The Auditor will complete the following 12 tasks upon receipt of the Notice to Proceed from the IDL.

#### **Limited Audit Process:**

1. Kickoff Meeting. Participate in a phone meeting with IDL to review the contract scope of services and timing, documents to be reviewed, work products to be developed, scheduling and coordination with the auditee, and other relevant topics. Provide summary meeting notes to IDL within three business days after the Kickoff Meeting.
2. Initial Review. Review Documents 1-8 listed above and provided in this RFP. Estimate the effort necessary to review the audit period data set that will be provided to the Auditor. The audit period data set is from three wells. The audit period data set encompasses 81 rows (more or less) organized in 13 columns as shown on Document 7 (IDL Royalty Report). Inform IDL about any concerns or data gaps based upon this review.
3. Analytical Review. Perform an analytical review of volume and payment reconciliations of the audit period data set, and document significant differences that are pertinent to audited leases. Using best professional judgment, inform IDL of additional recommended out-of-scope work and estimated costs, such as a gas processing plant audit.
4. Opening Conference Call. Coordinate with IDL and the Operator to schedule an opening conference call. The conference call will include a discussion of the audit scope, audit timing, pending document requests or questionnaires to be submitted to the Operator, and any other relevant topics.
5. Written Request. Submit a written request to the Operator requesting specific information in support of the audit. Coordinate with the Operator the handling of any proprietary information in accordance with the Idaho Publics Records Act.
6. Potential Field Visit. Assess the need for a field visit and make a recommendation to IDL regarding its impact and value related to the audit. The Auditor will coordinate with IDL and the



Operator regarding the scheduling, timing, logistics, and safety measures necessary should a field visit occur.

7. Review Schematic Diagrams. The Auditor will request any necessary schematic diagrams for oil and gas operations from the Operator. The Auditor will review these schematic diagrams for appropriate completeness, field equipment, measurement points, custody points, and commingling points. The Auditor will identify any differences or necessary additions.
8. Review and Summarize Documents. Review and summarize documents provided by the Operator, such as: sales contracts, gathering contracts, and processing contracts. For processing contracts, focus will be on pricing, allowable deductions, processed gas percentages, liquid settlement percentages, and custody point determinations.
9. Confirm Arm's Length Transactions. Confirm that the raw and processed hydrocarbon sales points identified by the Operator represent appropriate arms-length transactions.
10. Additional Recommendations. Propose recommendations for additional auditing tasks beyond the scope of this limited oil and gas audit that would be beneficial to IDL and the beneficiaries given that a comprehensive oil and gas audit may not be financially justifiable due to the current low level of hydrocarbon production.
11. Audit Report. Deliver an audit report to IDL that summarizes and documents the audit findings. The report must include any work papers, such as spreadsheets, that support the Auditor's findings and conclusions.
12. Board Presentation and Audit Review Workshop. Upon completion of the auditing work and audit report, conduct an in-person presentation of the audit findings and information related to the auditing process at a formal State Board of Land Commissioners meeting (scheduled on the third Tuesday of every month in Boise). Present a 3-hour audit review workshop at IDL, which must include the auditing process, methods, practices, recommendations for future best practices, and substantial time for questions and answers for workshop participants.

All deliverables will be submitted to: Mike Murphy, Endowment Leasing Bureau Chief, Idaho Department of Lands (or his designee); or in electronic format to [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov).

**Period Of Performance:**

The contract will become effective once signed by all parties. The Auditor and the Contracting Officer's Representative will discuss the contract terms, work performance requirements, and tentative work schedule at the mandatory Kickoff Meeting. All requirements of the contract scope of work must be satisfactorily completed by the dates as determined and mutually agreed upon during the kickoff meeting.

**Contracting Officer's Representative:**

Idaho Department of Lands  
Mike Murphy, Bureau Chief, Endowment Leasing  
300 North 6<sup>th</sup> Street, Suite 103  
Boise ID 83702  
Phone: 208-334-0290  
Email: [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov)

**ATTACHMENT F**

**DEMAND LETTER**

**SEPTEMBER 17, 2018**

**DIVISION OF LANDS AND WATERWAYS**  
**ENDOWMENT LEASING BUREAU**  
300 N 6<sup>TH</sup> STREET, SUITE 103  
PO Box 83720  
BOISE, ID 83720-0050  
PHONE (208) 334-0200  
FAX (208) 334-3698



DAVID GROESCHL, DIRECTOR

**STATE BOARD OF LAND COMMISSIONERS**  
*C. L. "Butch" Otter, Governor*  
*Lawrence E. Denney, Secretary of State*  
*Lawrence G. Wasden, Attorney General*  
*Brandon D Woolf, State Controller*  
*Sherri Ybarra, Sup't of Public Instruction*

September 17, 2018

AM Idaho LLC  
Harlan Chappelle, Manager  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

AM Idaho LLC  
F. David Murrell, VP Land and Business Development  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

Re: Idaho Department of Lands Oil & Gas Leases, Audit Findings

Dear Messrs. Chappelle and Murrell:

On August 21, 2018, the Idaho Department of Lands ("IDL") presented the Idaho State Board of Land Commissioners ("Land Board") with the findings of a limited oil and gas lease royalty audit ("Audit Report") completed by IDL's contractor Opportune LLP ("Opportune") of Houston, Texas. The timeframe for the audit period covered August 2015 through December 2016 ("Audit Period"). During this Audit Period, AM Idaho, LLC ("Alta Mesa") reported royalty sales volumes, average prices received, and royalty payments due on three producing wells:

ML Investments 1-10, IDL Oil and Gas Lease O-01983  
ML Investments 2-10, IDL Oil and Gas Lease O-01983  
State 1-17, IDL Oil and Gas Lease O-01996

IDL submits this demand for information to its lessee, Alta Mesa, pursuant to IDL's authority under the lease terms; IDAPA 20.01.16 - Rules Governing Oil & Gas Leasing on Idaho State Lands; and Idaho Code §§ 47-802, 47-805, 47-809(a), 47-331, 47-333, and 47-332(4) which expressly requires that: "The lessee must maintain, for a period of five (5) years, and make available to the lessor upon request, copies of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of the amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records that the lessor may require to verify the gross production, disposition and market value."

IDL requires that Alta Mesa take the following actions, and provide the following information to IDL, in order to ensure that royalty amounts paid during the Audit Period comply with governing State statutes, rules, and lease terms:

1. Alta Mesa complete an audit of ARM Energy Management LLC ("ARM") to ensure that Alta Mesa is receiving, and thus paying royalties on, market value pricing for production of oil and gas from State endowment lands. Based on the Audit Report, the prices received by Alta Mesa from ARM are significantly lower than various regional market spot pricing identified by Opportune. IDL requires that the ARM audit include, but not be limited to the

following information: a) documentation of how prices received by Alta Mesa from ARM were determined; b) identification of all deductions, whether direct or indirect, related to transportation, marketing and processing costs; and c) identification of the market location where all lease products were sold or shipped for sale. IDL requires completion of the ARM audit within sixty 60 days from the date of this letter and that Alta Mesa provide IDL with a copy of the ARM audit.

2. Alta Mesa provide payment of \$106.89 within 30 days of the date of this letter to IDL to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune's reconciliation of volumes entering and leaving the processing plant. The "plant fuel," which is consumed "off the lease" and is subject to royalty payments, is different from "lease fuel" that is consumed "on the lease" that does not require royalty payments (IDAPA 20.03.16.045.01). IDL is also requiring Alta Mesa to report on, and pay, the appropriate royalties for any "plant fuel" consumed to date since the Audit Period, and continue to report on and pay royalties for all consumed "plant fuel."
3. Alta Mesa provide payment of \$58.61 within 30 days of the date of this letter to compensate IDL for the royalties owed based on Opportune's reconciliation of royalties payable and the actual payments made during the Audit Period.
4. Alta Mesa provide to IDL, within 30 days of the date of this letter, a detailed and verified written explanation of why ARM should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between Alta Mesa and ARM, or other documentation that proves the existence of arm's-length sales transactions between Alta Mesa and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between Alta Mesa and ARM. If there is not any written agreement between Alta Mesa and ARM describing how payments are calculated please verify this in writing.
5. Alta Mesa provide to IDL, within 30 days of this letter, detailed statements, plant statements, reports or other documents to IDL that specify:
  - a) End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b) Each entity that ARM sold lease products to.
  - c) Each entity that transported the lease products.
  - d) Market location of where the lease products were sold.
6. Alta Mesa provide to IDL, within 30 days of the date of this letter, documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by Alta Mesa from the leases, such as propane and ethane.

Harlan Chappelle  
David Murrell  
September 17, 2018  
Page 3

Enclosed is a copy of the Audit Report as provided by Opportune. IDL will continue to review the audit findings, with assistance from the Attorney Generals' Office, and may request additional information from Alta Mesa related to the audit findings and compliance with lease terms.

Please contact me if you have any questions regarding these requirements of Alta Mesa, as the state of Idaho's lessee. My e-mail is [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov) and my phone number is (208) 334-0290.

Respectfully,

A handwritten signature in black ink that reads "Michael J. Murphy". The signature is written in a cursive style with a large, stylized initial "M".

Michael J. Murphy  
Bureau Chief – Endowment Leasing

Encl.: Opportune Audit Report

cc: Michael Christian, Attorney

**ATTACHMENT G**

**NOTICE OF DEFAULT**

**OCTOBER 26, 2018**



**STATE OF IDAHO**

OFFICE OF THE ATTORNEY GENERAL

LAWRENCE G. WASDEN

October 26, 2018

AM Idaho LLC  
c/o F. David Murrell  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525875

AM Idaho LLC  
c/o Harlan Chappelle  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525868

**Re: Notice of Default**  
**Oil and Gas Lease No. O-01996**  
**Oil and Gas Lease No. O-01983**

Dear Messrs. Murrell and Chappelle:

On September 17, 2018, the Idaho Department of Lands (“IDL”) delivered to each of you, on behalf of AM Idaho LLC, the enclosed demand letter requiring payment of delinquent royalties and the provision of specified documents and categories of documents. As of the date of this Notice of Default, IDL has not received any response to its September 17<sup>th</sup> demand letter. Consequently, this letter is the notice to AM Idaho LLC that it is in default of the State of Idaho, Oil and Gas Lease No. O-01996, dated June 1, 2016, and Oil and Gas Lease No. O-01983, dated June 1, 2006 (collectively “Leases”).

In accordance with the terms of the Leases and Idaho Code § 47-809, AM Idaho LLC has ninety (90) days from the date of this Notice of Default to cure its defaults – by Thursday, January 24, 2019. In order to cure the outstanding defaults, AM Idaho must take the following actions:

1. Provide IDL payment of \$106.89 to offset the royalties owed associated with the “plant fuel” consumed during the Audit Period as identified in the Audit Report based on Opportune LLC’s reconciliation of volumes entering and leaving the processing plant.

2. Provide IDL payment of \$58.61 to compensate IDL for the royalties owed based on Opportune LLC's reconciliation of royalties payable and the actual payments made during the Audit Period.
3. Provide to IDL a detailed and verified written explanation of why ARM Energy Management LLC ("ARM") should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between AM Idaho LLC and ARM, or other documentation that proves the existence of arm's-length sales transactions between AM Idaho LLC and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between AM Idaho LLC and ARM. If there is not any written agreement between AM Idaho LLC and ARM describing how payments are calculated please verify this in writing.
4. Provide to IDL detailed statements, plant statements, reports or other documents that specify:
  - a. End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b. Each entity that ARM sold lease products to.
  - c. Each entity that transported the lease products.
  - d. Market location of where the lease products were sold.
5. Provide to IDL documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by AM Idaho LLC from the Leases, such as propane and ethane.

If AM Idaho LLC does not cure these defaults on or before January 24, 2019, IDL may terminate the Leases and begin eviction proceedings against AM Idaho LLC. Upon termination, AM Idaho LLC will be required to relinquish possession of the leased premises. AM Idaho LLC may also be required to remove its personal property and improvements located on the leased premises, or IDL may remove them at AM Idaho LLC's cost. Additionally, if further legal action is required to enforce the terms and conditions of the Leases, then IDL will seek to recover its reasonable costs and attorney's fees incurred, in addition to accruing pre- and post-judgment interest. If IDL obtains a judgment against AM Idaho LLC, it may be reported to any credit bureau.

While AM Idaho LLC is in default of the Leases, neither AM Idaho LLC, nor any entity it is an owner or member of will be eligible to assign any lease, sublease any leased premises, or enter into any new lease for any state lands for any purpose. If either or both Leases are terminated, new leases will be auctioned in a competitive auction process or through any other lawful lease or



disposal process. AM Idaho LLC will not be allowed to participate in any such auction as long as it continues to be in default of either or both Leases.

In order for the defaults to be cured, IDL must receive full payment, complete and correct copies of all responsive documents, and all information required above on or before January 24, 2019. Postmarks will not be considered. You may mail or deliver the materials to: Idaho Department of Lands; c/o Mike Murphy, Endowment Leasing; 300 North 6th St, Ste 103; P.O. Box 83720; Boise, Idaho 83720-0050.

If you have any question with regard to this Notice of Default or the actions required to cure the defaults, please contact me, or have your attorney contact me at (208) 334-2400, or via email at [joy.vega@ag.idaho.gov](mailto:joy.vega@ag.idaho.gov).

Regards,



JOY M. VEGA  
Deputy Attorney General

Encl. – Sept. 17, 2018 Demand w/o Audit Report

JMV:mb

Ecc: Dustin Miller, IDL Director  
Diane French, IDL Division Administrator, Lands and Waterways  
Mike Murphy, IDL Bureau Chief, Endowment Leasing

**DIVISION OF LANDS AND WATERWAYS**  
**ENDOWMENT LEASING BUREAU**  
300 N 6<sup>TH</sup> STREET, SUITE 103  
PO BOX 83720  
BOISE, ID 83720-0050  
PHONE (208) 334-0200  
FAX (208) 334-3698



DAVID GROESCHL, DIRECTOR

**STATE BOARD OF LAND COMMISSIONERS**

*C. L. "Butch" Otter, Governor*  
*Lawrence E. Denney, Secretary of State*  
*Lawrence G. Wasden, Attorney General*  
*Brandon D Woolf, State Controller*  
*Sherri Ybarra, Sup't of Public Instruction*

September 17, 2018

AM Idaho LLC  
Harlan Chappelle, Manager  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

AM Idaho LLC  
F. David Murrell, VP Land and Business Development  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

Re: Idaho Department of Lands Oil & Gas Leases, Audit Findings

Dear Messrs. Chappelle and Murrell:

On August 21, 2018, the Idaho Department of Lands ("IDL") presented the Idaho State Board of Land Commissioners ("Land Board") with the findings of a limited oil and gas lease royalty audit ("Audit Report") completed by IDL's contractor Opportune LLP ("Opportune") of Houston, Texas. The timeframe for the audit period covered August 2015 through December 2016 ("Audit Period"). During this Audit Period, AM Idaho, LLC ("Alta Mesa") reported royalty sales volumes, average prices received, and royalty payments due on three producing wells:

ML Investments 1-10, IDL Oil and Gas Lease O-01983  
ML Investments 2-10, IDL Oil and Gas Lease O-01983  
State 1-17, IDL Oil and Gas Lease O-01996

IDL submits this demand for information to its lessee, Alta Mesa, pursuant to IDL's authority under the lease terms; IDAPA 20.01.16 - Rules Governing Oil & Gas Leasing on Idaho State Lands; and Idaho Code §§ 47-802, 47-805, 47-809(a), 47-331, 47-333, and 47-332(4) which expressly requires that: "The lessee must maintain, for a period of five (5) years, and make available to the lessor upon request, copies of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of the amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records that the lessor may require to verify the gross production, disposition and market value."

IDL requires that Alta Mesa take the following actions, and provide the following information to IDL, in order to ensure that royalty amounts paid during the Audit Period comply with governing State statutes, rules, and lease terms:

1. Alta Mesa complete an audit of ARM Energy Management LLC ("ARM") to ensure that Alta Mesa is receiving, and thus paying royalties on, market value pricing for production of oil and gas from State endowment lands. Based on the Audit Report, the prices received by Alta Mesa from ARM are significantly lower than various regional market spot pricing identified by Opportune. IDL requires that the ARM audit include, but not be limited to the

following information: a) documentation of how prices received by Alta Mesa from ARM were determined; b) identification of all deductions, whether direct or indirect, related to transportation, marketing and processing costs; and c) identification of the market location where all lease products were sold or shipped for sale. IDL requires completion of the ARM audit within sixty 60 days from the date of this letter and that Alta Mesa provide IDL with a copy of the ARM audit.

2. Alta Mesa provide payment of \$106.89 within 30 days of the date of this letter to IDL to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune's reconciliation of volumes entering and leaving the processing plant. The "plant fuel," which is consumed "off the lease" and is subject to royalty payments, is different from "lease fuel" that is consumed "on the lease" that does not require royalty payments (IDAPA 20.03.16.045.01). IDL is also requiring Alta Mesa to report on, and pay, the appropriate royalties for any "plant fuel" consumed to date since the Audit Period, and continue to report on and pay royalties for all consumed "plant fuel."
3. Alta Mesa provide payment of \$58.61 within 30 days of the date of this letter to compensate IDL for the royalties owed based on Opportune's reconciliation of royalties payable and the actual payments made during the Audit Period.
4. Alta Mesa provide to IDL, within 30 days of the date of this letter, a detailed and verified written explanation of why ARM should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between Alta Mesa and ARM, or other documentation that proves the existence of arm's-length sales transactions between Alta Mesa and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between Alta Mesa and ARM. If there is not any written agreement between Alta Mesa and ARM describing how payments are calculated please verify this in writing.
5. Alta Mesa provide to IDL, within 30 days of this letter, detailed statements, plant statements, reports or other documents to IDL that specify:
  - a) End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b) Each entity that ARM sold lease products to.
  - c) Each entity that transported the lease products.
  - d) Market location of where the lease products were sold.
6. Alta Mesa provide to IDL, within 30 days of the date of this letter, documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by Alta Mesa from the leases, such as propane and ethane.



Harlan Chappelle  
David Murrell  
September 17, 2018  
Page 3

Enclosed is a copy of the Audit Report as provided by Opportune. IDL will continue to review the audit findings, with assistance from the Attorney Generals' Office, and may request additional information from Alta Mesa related to the audit findings and compliance with lease terms.

Please contact me if you have any questions regarding these requirements of Alta Mesa, as the state of Idaho's lessee. My e-mail is [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov) and my phone number is (208) 334-0290.

Respectfully,



Michael J. Murphy  
Bureau Chief – Endowment Leasing

Encl.: Opportune Audit Report

cc: Michael Christian, Attorney

# **ATTACHMENT H**

## **OPPORTUNE AUDIT REPORT**



Idaho Department of Lands  
ATTN: Michael Murphy,  
Bureau Chief – Endowment Leasing  
300 N. 6th St Suite 103  
Boise, ID 83702

August 2, 2019

Dear Mr. Murphy:

Following the completion of an oil and gas lease royalty audit for the timeframe July 2015 through December 2016 (“Audit Period”) by Opportune LLP (“Opportune”), the Idaho Department of Lands (“IDL”) issued a demand letter dated September 17, 2018 (attached) to AM Idaho LLC (“AM Idaho”) related to its affiliate Alta Mesa entities for oil and gas leases O-01996 and O-01983. The demand letter required payment of delinquent royalties and required that certain specified documents and categories of documents be provided to IDL.

Subsequent to the demand letter, IDL issued a Notice of Default, dated October 26, 2018, to AM Idaho (Attachment A). The Notice of Default required submittal of the previously requested payments and documentation by January 24, 2019.

On January 18, 2019 AM Idaho provided documentation to IDL which did not satisfy the requirements of the Notice of Default. On January 31, 2019, IDL submitted a letter (Attachment B) to AM Idaho allowing a final effort to provide IDL with the required documentation by February 7, 2019.

On February 7, 2019, the law offices of Marcus, Christian, Hardee, and Davies, LLP (“Christian”) answered on behalf of AM Idaho with a response letter. Christian’s letter noted that AM Idaho does not agree that it is in default. Additionally, Christian stated that AM Idaho provided the requested documents via a Dropbox link. IDL requested Opportune LLP (“Opportune”) review the files from the Dropbox link in order to determine if AM Idaho has complied with the Notice of Default.

#### **REVIEW AND STATUS OF COMPLIANCE DEMAND #1**

No documentation has been provided to IDL or Opportune by AM Idaho or Alta Mesa regarding an audit of ARM. This Compliance Demand has not been resolved. According to IDL, AM Idaho has stated it does not intend to conduct the audit.

#### **REVIEW AND STATUS OF COMPLIANCE DEMAND #2**

According to IDL, AM Idaho did submit payment to IDL on November 6, 2018 for the \$106.89 owed for “plant fuel” consumed during the audit period of July 2015 through August 2016. This Compliance Demand has been resolved for the Audit Period. Going forward, AM Idaho and High Mesa should itemize plant fuel on check stubs that are submitted to IDL.

#### **REVIEW AND STATUS OF COMPLIANCE DEMAND #3**

According to IDL, AM Idaho did submit payment to IDL on November 6, 2018 for the \$58.61 owed for the royalties owed based on Opportune's reconciliation of royalties payable and the actual payments made during the Audit Period. This Compliance Demand has been resolved for the Audit Period.

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www.opportune.com

#### **REVIEW AND STATUS OF COMPLIANCE DEMAND #4**

AM Idaho has not provided a written explanation as to why ARM should be considered an arm's length counterparty. This Compliance Demand has not been resolved.

#### **REVIEW AND STATUS OF COMPLIANCE DEMAND #5**

AM Idaho provided additional detail support to IDL including contracts with third parties, agreements and supporting documentation detailing transportation charges that AM Idaho was charged and passed on to IDL, and sales confirmations of the market locations where its products were sold and the commodity indices for pricing. AM Idaho provided these supporting documents for the Audit Period as well as also providing this detail for the additional months of January 2017 through August 2018 (the "Supplemental Period"). This additional documentation supported much of the pricing discrepancies that were identified during the Audit Period. This report reconciles the pricing and values reported by AM Idaho and the detail support that was provided for both the Audit Period and the Supplemental Period. As of April 2018, we noted that High Mesa Inc., the parent company of Alta Mesa, was the named entity on trade confirmations, so we understand that they are the new operator on the IDL leases. High Mesa has maintained contractual relationships with ARM and Northwest Gas Processing.

AM Idaho has provided analysis of the periods August 2015 through August 2018 with reported volumes and values with monthly prices that have been increased by \$1.50 per MCF of residue gas and \$5.50 per barrel of condensate sold for the volumes processed in the Highway 30 by Northwest Gas Processing (See Appendix A) and then multiplying the values by the net revenue interests ("NRI") in the wells. These amounts were provided by AM Idaho to IDL as a basis of negotiating. Based on the analysis, AM Idaho owes \$48,594.38 by adding the \$1.50/MCF and \$5.50/barrel for residue gas and condensate, respectively for the period August 2015 through August 2018. In Appendix A, AM Idaho provides that it paid \$61,823.37 for the Audit Period plus the Supplemental Period, but with the transportation fees, the total royalty would be \$110,421.75. Northwest Gas Processing provides processing services related to the wells producing on IDL lease O-01996. Northwest Gas Processing does not process gas associated with production for lease O-01983.

AM Idaho has provided a First Amendment ("Amendment") to a Hydrocarbon Transportation Agreement with an effective date of August 1, 2015 which establishes the \$1.50/MCF and \$5.50/barrel fees between Northwest Gas Processing and ARM Attachment C1). The Amendment is related to the Hydrocarbon Transportation Agreement, dated February 1, 2015, which established fees of \$1.50/MCF and \$7.75/barrel of condensate.

The Northwest Gas Processing Highway 30 facility processed AM Idaho's residual natural gas, natural gas liquids and condensate. Each product is sold under its own contract in its own market. This report will address each product separately. Additionally, the Idaho Oil and Gas Conservation Commission (Commission) noted discrepancies in reported volumes for Residue Gas and Condensate reported by AM Idaho. The Commission brought this to the attention of AM Idaho. AM Idaho provided a schedule which addressed the discrepancies. These discrepancies are addressed separately below in this Report.

#### **Natural Gas:**

AM Idaho has provided monthly trade confirmations between ARM, as buyer, and Alta Mesa, as seller, for natural gas (see sample confirmation at Attachment D). These individual monthly trades are styled based on a maximum daily quantity with the stated index (For example: "Stepped (@16000 MBTU: GD-NW, S. of Green River, Rockies+ 0)". In this example the 16,000 is a daily MMBTU amount of sales. GD is Gas Daily, a pricing service, NW, S. of Green River, Rockies is a pricing point which is monitored by gas traders, and +0 is a dollar amount over or below the index value. In

this case, the seller should be paid the index price with no difference. The confirmation notes that fees are less any applicable gathering and transportation fees. For the 16 months of the Audit Period and Supplemental Period, the index pricing is the Gas Daily pricing for NW, South of Green River (a collection point for the Rockies) except for May of 2016 which uses a contract index of Gas Daily, Stansfield, Oregon (a different collection point for the Rockies).

The indices were based on Gas Daily's reported pricing. We attempted to obtain pricing from Gas Daily. Unfortunately, the pricing was unduly expensive (\$3,000) for the reporting period. We decided to purchase the Natural Gas Intelligence ("NGI") pricing at NW, S of Green River (see Appendix B). NGI aggregates pricing data from traders and sellers at various collection points using a multitude of data points for a given location. The pricing for the single index was \$1,000, and we believe the pricing is adequate for testing purposes, especially given the adjustment is primarily related to transportation fees described in more detail below. Beginning in June of 2017 during the Supplemental Period, pricing is based on the Stansfield, Oregon collection point with no differential. We believe our pricing data will adequately serve as a proxy for the Stansfield, Oregon index as most of the adjustment is related to the transportation charge.

AM Idaho has also provided monthly statements noting a \$1.50/MCF transportation fee associated with fees for transportation on the Northwest Pipeline (See Attachment C2 for sample statement). There was no inclusion of separate gathering fees, and Alta Mesa has separately stated that no gathering fees were charged. As previously noted, we have reviewed the Hydrocarbon Transportation Agreement Amendment between Northwest Gas Processing and ARM which includes the \$1.50 transportation fee. Northwest Gas Processing did not disclose these transportation fees on its monthly plant statements, nor were these fees included in the monthly statements from ARM to Alta Mesa. We have asked Alta Mesa about the fees and were told that no fees were separately charged. If initially charged, these fees were deducted from amounts received by ARM.

We compared the received prices plus the \$1.50 deduction with the index price in order to compare the actual price received with the expected, index price. One key point is that sales volumes are based on MMBTUs, and index prices are also sold based on MMBTUs, a unit of energy. The transportation deductions to the plant are based on MCFs, a unit of volume, delivered to the plant. Therefore, we have compared delivered MCFs to sold MMBTUs in order to derive an effective MMBTU transportation costs on a monthly basis. Our methodology yielded a lower recovery than offered by AM Idaho in Appendix A. They appear to be calculating repayment based on multiplying the \$1.50 rate by MMBTUs rather than MCFs. AM Idaho's calculated gas transportation recovery is \$42,357.14. Our calculated transportation recovery was \$36,864.28 for both the Audit Period and Supplemental Period. Based on our analysis, we determined that the received price plus the transportation fee plus the monthly transportation cost is less than the index price. There is a remaining average price difference of approximately \$.096/MMBTU. No explanation has been provided for this discrepancy, and no additional fees have been described by Alta Mesa. Therefore, we believe this should yield an additional adjustment of \$2,660.21 for a total due of \$39,524.49. See analysis below:



Production Month	Price for Residue Gas per MMBTU on IDL Monthly Royalty Reports	Transportation Fee Charged per MCF	Transportation Fee Converted From MCF to MMBTU	Price + Transportation Fee per MMBTU	Proxy Index Price Used in Place of Contract Index Price per MMBTU	Difference Between Proxy Index Price & Contract Index Price per MMBTU	Total MMBTUs Sold From All Wells	Total Mcf Delivered From All Wells	Additional Royalty Owed IDL from Improperly Deducted Transportation Fee	Additional Royalty Owed IDL from Unexplained Discrepancies Between Index Prices
Sep-15	0.96	1.50	1.46	2.42	2.519	-0.095	114,163.22	111,464.11	1,306.22	84.29
Oct-15	0.92	1.50	1.17	2.09	2.178	-0.085	141,259.66	110,440.65	1,294.23	94.29
Nov-15	0.80	1.50	1.18	1.98	2.029	-0.047	84,454.82	66,569.08	780.11	31.10
Dec-15	0.39	1.50	1.46	1.85	1.999	-0.147	128,889.31	125,628.43	1,472.21	147.60
Jan-16	0.83	1.50	1.26	2.09	2.167	-0.081	153,387.82	128,431.44	1,505.06	97.57
Feb-16	0.18	1.50	1.41	1.59	1.746	-0.159	92,153.96	86,466.92	1,013.28	114.16
Mar-16	0.09	1.50	1.30	1.39	1.470	-0.078	95,641.88	83,020.92	972.90	58.24
Apr-16	0.20	1.50	1.35	1.55	1.648	-0.098	100,299.40	90,217.08	1,057.23	77.11
May-16	0.35	1.50	1.28	1.63	1.737	-0.107	106,926.60	91,213.74	1,068.91	89.32
Jun-16	0.90	1.50	1.31	2.21	2.281	-0.072	81,127.75	70,768.23	829.32	45.92
Jul-16	1.13	1.50	1.32	2.45	2.534	-0.086	73,981.17	64,993.71	761.65	49.55
Aug-16	1.19	1.50	1.30	2.49	2.555	-0.062	74,339.63	64,580.94	756.81	36.08
Sep-16	1.32	1.50	1.29	2.61	2.686	-0.071	114,867.37	99,159.40	1,162.02	63.57
Oct-16	1.17	1.50	1.40	2.57	2.658	-0.083	70,898.79	66,405.12	778.19	46.07
Nov-16	0.89	1.50	1.28	2.17	2.255	-0.081	122,927.44	105,243.11	1,233.32	77.84
Dec-16	2.10	1.50	1.28	3.38	3.423	-0.041	119,348.51	102,041.37	1,195.80	38.09
Jan-17	1.84	1.50	1.29	3.13	3.163	-0.029	110,228.65	94,970.78	1,112.94	24.99
Feb-17	1.20	1.50	1.32	2.52	2.599	-0.081	105,339.48	92,813.08	1,087.65	66.47
Mar-17	1.15	1.50	1.31	2.45	2.513	-0.058	114,315.04	99,673.97	1,168.05	51.98
Apr-17	1.41	1.50	1.23	2.64	2.707	-0.065	114,355.32	93,623.69	1,097.15	58.25
May-17	1.24	1.50	1.42	2.66	2.745	-0.084	100,656.96	95,070.41	1,114.11	65.74
Jun-17	1.05	1.50	1.31	2.36	2.556	-0.194	103,075.46	89,962.94	1,054.25	156.24
Jul-17	1.11	1.50	1.31	2.43	2.534	-0.108	99,495.56	86,959.91	1,019.06	84.11
Aug-17	1.22	1.50	1.28	2.50	2.561	-0.062	96,047.62	81,924.99	960.06	46.74
Sep-17	1.19	1.50	1.34	2.52	2.686	-0.164	89,092.80	79,346.18	929.84	114.41
Oct-17	1.17	1.50	1.32	2.49	2.551	-0.066	89,633.96	78,697.96	922.24	45.91
Nov-17	1.31	1.50	1.30	2.61	2.704	-0.097	84,391.36	72,984.05	855.28	63.78
Dec-17	1.19	1.50	1.33	2.53	2.523	0.004	79,014.95	70,179.23	822.41	(2.50)
Jan-18	1.32	1.50	1.32	2.65	2.932	-0.286	67,106.88	59,207.42	693.84	149.76
Feb-08	0.95	1.50	1.25	2.21	2.293	-0.085	106,141.65	88,659.25	1,038.98	70.35
Mar-18	0.70	1.50	1.36	2.05	2.106	-0.053	112,874.53	102,029.30	1,195.66	46.57
Apr-18	0.56	1.50	1.32	1.88	1.985	-0.102	89,631.94	79,003.94	925.83	71.22
May-18	0.27	1.50	1.30	1.56	1.787	-0.224	99,946.66	86,445.83	1,013.04	175.18
Jun-18	0.70	1.50	1.29	1.99	2.178	-0.192	94,471.44	81,223.41	951.84	141.99
Jul-18	0.98	1.50	1.32	2.30	2.394	-0.094	86,815.04	76,683.58	898.64	63.54
Aug-18	1.13	1.50	1.33	2.46	2.480	-0.024	78,703.23	69,647.76	816.18	14.66
Total									36,864.28	2,660.21

**Natural Gas Liquids:**

AM Idaho has provided third-party sales contracts for the sale of NGLS to NGL Supply Company, LTD (August 2015-March 2016 & April 2016-March 2017). The contracts are signed by both ARM and Alta Mesa. NGLs are indexed to Conway, Oklahoma less a differential (“Contract Adjustment”). Conway has readily available pricing information for the various NGLs. Contracts noted sales location as an Ontario, Oregon facility.

We reviewed the sales contracts and summarize the first two as follows:

Contract 1: Effective Date of August 1, 2015 to March 31, 2016; Delivery of 630,000 gallons per month; pricing—OPIS Conway month average by component less a \$0.45 Contract Adjustment for clear, conforming, on spec Y Grade. (See Attachment E)

Contract 2: Effective Date April 1, 2016 to March 31, 2017; Delivery of 750,000 gallons per month; pricing—OPIS Conway month average less \$0.3450us/per component as a Contract Adjustment. (see Attachment F)

We obtained OPIS NGL pricing for the calendar years 2015-2016 (See Appendix C). We then compared the OPIS price to the reported price on a monthly basis including the contract component difference for the periods August 2015 through December 2016 in order to derive an expected price. In general, we noted that the expected prices were higher by approximately \$.10/gallon than reported prices. AM Idaho has not provided any contractual deductions for transportation, processing, or any other deduction. Additionally, we noted that the difference in April 2016 was approximately \$.17/gallon rather than \$.10/gallon. April was the first month of the new contract, so we believe that Alta Mesa/ARM misbilled or misapplied the contract resulting in incorrect lower royalties. Based on reported, sold volumes and IDL’s .78% net revenue interest, we have recalculated additional NGL royalties of \$1,654.65. Going forward, IDL should be paid based on the contractual receipts received by ARM.

The following analysis reflects the monthly contract analysis comparing the actual prices received for each NGL component (“Realized Prices”) plus the Contract Adjustment to OPIS pricing:

Idaho Department of Lands  
 August 2, 2019  
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IDL Royalty Audit  
 NGL Pricing Analysis  
 August 2015-Dec 2016  
 (Prices = \$/gallon)

Realized Prices	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Ethane	(0.3958)	(0.3908)	(0.3846)	(0.4064)	(0.4275)	(0.4154)	(0.4244)	(0.4236)	(0.3535)	(0.2882)	(0.2650)	(0.3042)	(0.2906)	(0.2767)	(0.2356)	(0.2709)	(0.2124)
Propane	(0.2219)	(0.1249)	(0.1381)	(0.1626)	(0.2265)	(0.2545)	(0.2201)	(0.1500)	(0.0882)	0.0343	0.0200	(0.0237)	(0.0673)	(0.0044)	0.0972	0.0531	0.1717
Isobutane	(0.0264)	0.0752	0.1002	0.1274	0.0494	(0.0181)	0.0501	0.0258	0.1376	0.2684	0.2876	0.2078	0.2002	0.2569	0.4108	0.3935	0.6025
Normal Butane	(0.1102)	(0.0296)	0.0284	0.0428	(0.0188)	(0.0911)	(0.0753)	(0.0648)	0.0167	0.1799	0.1692	0.1297	0.0915	0.1534	0.2975	0.2738	0.5065
Natural Gasoline	0.3832	0.4177	0.4355	0.4078	0.3582	0.1706	0.1337	0.2857	0.4185	0.5663	0.5785	0.4910	0.5027	0.4947	0.6780	0.5895	0.7299
<b>Contract Adjustment</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.45</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>
Ethane	0.0542	0.0592	0.0654	0.0436	0.0225	0.0346	0.0256	0.0264	(0.0085)	0.0568	0.0800	0.0408	0.0544	0.0683	0.1094	0.0741	0.1326
Propane	0.2281	0.3251	0.3119	0.2874	0.2235	0.1955	0.2299	0.3000	0.2568	0.3793	0.3650	0.3213	0.2777	0.3406	0.4422	0.3981	0.5167
Isobutane	0.4236	0.5252	0.5502	0.5774	0.4994	0.4319	0.5001	0.4758	0.4826	0.6134	0.6326	0.5528	0.5452	0.6019	0.7558	0.7385	0.9475
Normal Butane	0.3398	0.4204	0.4784	0.4928	0.4312	0.3589	0.3747	0.3852	0.3617	0.5249	0.5142	0.4747	0.4365	0.4984	0.6425	0.6188	0.8515
Natural Gasoline	0.8332	0.8677	0.8855	0.8578	0.8082	0.6206	0.5837	0.7357	0.7635	0.9113	0.9235	0.8360	0.8477	0.8397	1.0230	0.9345	1.0749
<b>OPIS Pricing (In-Line ANY Avg)</b>																	
Ethane	0.1554	0.1604	0.1666	0.1448	0.1270	0.1391	0.1301	0.1310	0.1532	0.1614	0.1846	0.1453	0.1589	0.1728	0.2139	0.1786	0.2371
Propane	0.3293	0.4263	0.4131	0.3886	0.3280	0.3001	0.3344	0.4045	0.4238	0.4838	0.4695	0.4258	0.3822	0.4451	0.5468	0.5027	0.6213
Isobutane	0.5248	0.6264	0.6514	0.6786	0.6039	0.5364	0.6047	0.5803	0.6501	0.7179	0.7371	0.6573	0.6497	0.7064	0.8603	0.8430	1.0520
Normal Butane	0.4410	0.5216	0.5796	0.5940	0.5357	0.4635	0.4793	0.4898	0.5297	0.6294	0.6187	0.5792	0.5410	0.6029	0.7470	0.7233	0.9560
Natural Gasoline	0.9344	0.9689	0.9867	0.9590	0.9127	0.7251	0.6882	0.8402	0.9318	1.0158	1.0280	0.9405	0.9523	0.9442	1.1276	1.0391	1.1794
<b>Variance</b>																	
Ethane	(0.1012)	(0.1012)	(0.1012)	(0.1012)	(0.1045)	(0.1045)	(0.1046)	(0.1617)	(0.1046)	(0.1046)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)
Propane	(0.1012)	(0.1012)	(0.1012)	(0.1012)	(0.1045)	(0.1046)	(0.1045)	(0.1045)	(0.1669)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1046)	(0.1046)	(0.1046)
Isobutane	(0.1012)	(0.1012)	(0.1012)	(0.1012)	(0.1045)	(0.1045)	(0.1046)	(0.1045)	(0.1675)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)
Normal Butane	(0.1012)	(0.1012)	(0.1012)	(0.1012)	(0.1045)	(0.1046)	(0.1046)	(0.1046)	(0.1681)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)
Natural Gasoline	(0.1012)	(0.1012)	(0.1012)	(0.1012)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1684)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1045)	(0.1046)	(0.1046)	(0.1045)

Based on the above calculated variances, we have calculated the IDL royalty adjustment as follows:

NGL Pricing Analysis  
 August 2015-Dec 2016  
 Gross and Net Royalty Adjustment (all amounts in \$)

	Total Gross Value															
	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Ethane	949.08	957.61	929.66	992.63	1,572.26	560.52	522.39	1,253.53	1,196.55	1,266.00	1,278.62	1,204.48	902.13	399.82	888.85	1,083.46
Propane	1,656.11	3,924.84	3,907.90	4,536.30	6,054.69	2,251.90	3,120.37	4,353.74	4,426.61	4,019.02	3,983.68	3,881.90	3,063.79	1,571.81	3,824.90	3,614.76
Isobutane	813.46	1,862.50	2,150.79	2,441.81	2,835.39	1,041.13	1,466.66	2,170.05	2,242.06	1,954.37	1,894.94	1,806.88	1,523.85	848.03	2,024.06	1,805.03
Normal Butane	1,438.84	3,265.36	3,348.19	4,155.66	5,078.23	1,983.57	2,686.07	3,942.82	4,001.70	3,472.27	3,360.71	3,155.68	2,804.69	1,530.05	3,743.57	3,243.12
Natural Gasoline	1,998.83	4,270.44	4,121.83	4,099.02	5,089.52	2,069.24	2,795.32	3,973.05	5,673.00	3,674.63	3,572.37	3,411.24	3,547.47	1,846.75	4,348.20	3,063.39
	\$ 6,856.32	\$ 14,280.74	\$ 14,458.36	\$ 16,225.41	\$ 20,630.09	\$ 7,906.36	\$ 10,590.80	\$ 15,693.18	\$ 17,539.92	\$ 14,386.29	\$ 14,090.32	\$ 13,460.18	\$ 11,841.95	\$ 6,196.46	\$ 14,829.58	\$ 12,809.76
0.78%	IDL Royalty															
	\$ 53.56	\$ 111.57	\$ 112.96	\$ 126.76	\$ 161.17	\$ 61.77	\$ 82.74	\$ 122.60	\$ 137.03	\$ 112.39	\$ 110.08	\$ 105.16	\$ 92.52	\$ 48.41	\$ 115.86	\$ 100.08

Total \$ 1,654.65

Using the same methodology, we calculated an additional \$1,405.15 in royalties for the Supplemental Period for NGLs. See full analysis of Supplemental Period at Appendix D. AM Idaho did not provide a plant statement for January 2018, so we could not calculate values by individual product. We took an aggregate differential of \$.0748/gallon which was calculated in both December of 2017 and February 2018. See summary analysis below:



IDL Royalty Audit  
 NGL Pricing Analysis  
 Jan 2017-Aug 2018  
 Royalty Received (\$)

	Total Gross Value											
	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Ethane	1,217.99	678.64	433.13	1,031.70	623.97	510.91	352.58	496.25	643.44	314.97	125.74	182.54
Propane	5,028.51	7,391.67	1,807.56	3,662.11	2,235.50	2,473.40	1,561.98	2,198.37	2,753.99	1,421.29	2,251.22	1,349.52
Isobutane	2,749.24	6,057.70	886.16	1,791.87	1,114.70	1,274.73	740.61	1,178.12	1,488.80	720.99	1,189.61	734.79
Normal Butane	4,942.74	10,981.01	1,579.72	3,386.81	1,888.37	2,298.91	1,352.20	2,201.01	2,781.46	1,285.57	2,205.57	1,347.02
Natural Gasoline	4,765.74	4,215.76	1,420.44	2,791.12	1,604.24	2,434.47	1,567.90	2,903.70	3,826.56	1,644.70	2,516.36	1,604.12
	<b>18,704</b>	<b>29,325</b>	<b>6,127</b>	<b>12,664</b>	<b>7,467</b>	<b>8,992</b>	<b>5,575</b>	<b>8,977</b>	<b>11,494</b>	<b>5,388</b>	<b>8,288</b>	<b>5,218</b>

0.78%	IDL Royalty											
	146.13	229.10	47.87	98.93	58.33	70.25	43.56	70.14	89.80	42.09	64.75	40.77

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Ethane	-	415.60	468.28	424.45	475.23	392.38	337.98	(1,907.37)
Propane	-	2,894.63	2,270.84	1,448.19	2,084.25	2,919.96	1,954.12	0.13
Isobutane	-	1,353.20	1,154.00	487.83	507.71	630.52	991.09	(0.07)
Normal Butane	-	2,510.75	2,106.45	1,148.41	1,426.55	2,016.37	1,854.49	0.05
Natural Gasoline	-	2,726.19	2,105.34	1,319.71	1,524.11	6,374.42	2,235.88	(160.99)
	<b>5,149.19</b>	<b>9,900</b>	<b>8,105</b>	<b>4,829</b>	<b>6,018</b>	<b>12,334</b>	<b>7,374</b>	<b>(2,068)</b>

	IDL Royalty							
	40.23	77.35	63.32	37.72	47.01	96.36	57.61	(16.16)

Total \$ 1,405.15

**Condensate:**

AM Idaho has provided a sales contract and associated amendment between ARM and Big West Oil, LLC, third party purchaser, for the periods August 2015 through 2018 (see Attachment G). The contract's pricing was based on prompt month NYMEX light sweet crude less a differential. For the period August through October 2015, the contract was based on NYMEX less a \$12.68 differential. The differential changed three times through the end of the Supplemental Period. We have compared this amount to the NYMEX Cushing rates for the periods September 2015 through August 2018.

We previously reviewed the marketing agreement between Alta Mesa and ARM, but we were not allowed to take a copy of it. Alta Mesa has now provided a copy of the agreement dated January 8, 2015 and an amendment dated January 15, 2016 ("Marketing Agreement" see Attachment H1 & H2). The Marketing Agreement includes a transloading fee. Based on the definition of the fees and the fact that no other transportation fees are provided by Alta Mesa, we assume this fee is the cost of trucking condensate to the rail facility to then be shipped to Big West Oil, LLC. The transloading fees were \$4.25/barrel for the first 500,000 barrels amended to \$4.39/barrel as of January 2016. For all barrels in addition to 500,000, the transloading fee was \$3.00/barrel amended to \$3.14/barrel as of January 2016. None of these transportation fees were previously included in the Northwest Gas Processing plant statements nor the statements from ARM to Alta Mesa that were provided to IDL in satisfaction of the data request related to the original royalty audit. In the review of supporting documentation, we saw no evidence of any additional transportation or transloading fees being charged.

For the purposes of calculating additional royalties, we compared the received rates with the index rates less differential in order to calculate a remaining difference. We assumed a \$5.50 transportation rate for all volumes and all months. This transportation charge should be disallowed based on AM Idaho's analysis. The value related to the transportation charge was calculated as \$3,932.89 for the Audit Period and Supplemental Period. Any remaining differences per barrel were calculated separately. We calculated \$2,059.41 in additional royalties related to the difference in rates received than the contract terms with Big West for a total due of \$5,992.30. See analysis below:

Production Month	Monthly Avg. of WTI (West Texas Intermediate) Crude Benchmark Prices at Cushing, Oklahoma Storage Hub	Contract Total Discount from WTI Benchmark due to Quality, Marketability, & Logistics	Price Based on WTI Benchmark after Total Discounts are subtracted	Price Received by IDL	Price Difference of WTI less Total Discounts VERSUS Price to IDL	Transport Fee per NW Gas Processing/ARM Contract	Remaining Unexplained Price Difference	Monthly Gross Condensate Volumes in Barrels from Lease O-01996	Monthly Gross Values From Lease O-01996	Transport Fee of \$5.50 NOT Allowed at 0.78125% Royalty Interest	Remaining Unexplained Difference at 0.78125% Royalty Interest	
Sep-15	45.47	12.68	32.79	21.90	10.89	5.50	5.39	3,699.00	40,264.50	158.94	155.52	
Oct-15	46.29	12.68	33.61	22.25	11.36	5.50	5.86	3,311.23	37,614.07	142.28	151.58	
Nov-15	42.92	12.68	30.24	20.46	9.78	5.50	4.28	2,101.00	20,554.08	90.28	70.30	
Dec-15	37.33	12.68	24.65	17.13	7.52	5.50	2.02	3,219.00	24,198.10	138.32	50.73	
Jan-16	31.78	12.68	19.10	13.19	5.91	5.50	0.41	3,974.00	23,469.61	170.76	12.60	
Feb-16	30.62	12.68	17.94	12.86	5.08	5.50	(0.42)	2,436.00	12,366.35	104.67	(8.06)	
Mar-16	37.96	12.68	25.28	22.00	3.28	5.50	(2.22)	2,879.56	9,447.57	123.73	(49.92)	
Apr-16	41.12	12.68	28.44	24.52	3.92	5.50	(1.58)	2,615.39	10,264.78	112.38	(32.19)	
May-16	46.80	12.68	34.12	29.40	4.72	5.50	(0.78)	2,828.97	13,343.31	121.56	(17.31)	
Jun-16	48.85	12.68	36.17	31.73	4.44	5.50	(1.06)	2,211.33	9,825.34	95.02	(18.26)	
Jul-16	44.80	12.68	32.12	26.46	5.66	5.50	0.16	1,902.39	10,766.58	81.74	2.37	
Aug-16	44.80	12.68	32.12	26.90	5.22	5.50	(0.28)	2,073.83	10,823.59	89.11	(4.55)	
Sep-16	45.23	12.68	32.55	27.50	5.05	5.50	(0.45)	3,181.29	16,051.88	136.70	(11.29)	
Oct-16	49.94	12.68	37.26	31.50	5.76	5.50	0.26	2,205.00	12,701.52	94.75	4.48	
Nov-16	45.76	12.93	32.83	21.87	10.96	5.50	5.46	3,376.16	37,017.18	145.07	144.13	
Dec-16	52.27	12.93	39.24	26.88	12.36	5.50	6.86	3,050.51	37,691.23	131.08	163.39	
Jan-17	52.61	12.93	39.68	28.76	10.92	5.50	5.42	3,074.14	33,574.43	132.09	130.21	
Feb-17	53.46	12.93	40.53	28.97	11.56	5.50	6.06	2,819.03	32,581.79	121.13	133.42	
Mar-17	49.67	12.93	36.74	36.41	0.33	5.50	(5.17)	2,851.76	949.40	122.54	(115.12)	
Apr-17	51.12	12.93	38.19	29.69	8.49	5.50	2.99	2,674.59	22,714.43	114.92	62.53	
May-17	48.54	12.93	35.61	25.43	10.18	5.50	4.68	2,902.34	29,539.01	124.71	106.06	
Jun-17	45.20	12.93	32.27	21.74	10.52	5.50	5.02	2,460.82	25,890.52	105.74	96.53	
Jul-17	46.68	12.11	34.57	24.20	10.37	5.50	4.87	2,123.37	22,016.62	91.24	80.77	
Aug-17	48.06	12.11	35.95	26.08	9.86	5.50	4.36	2,306.59	22,749.93	99.11	78.62	
Sep-17	49.88	12.11	37.77	23.83	13.94	5.50	8.44	1,475.80	20,571.29	63.41	97.30	
Oct-17	51.59	12.11	39.48	28.67	10.81	5.50	5.31	2,112.87	22,842.24	90.79	87.67	
Nov-17	56.66	12.11	44.55	34.95	9.60	5.50	4.10	2,099.97	20,169.86	90.23	67.34	
Dec-17	57.95	12.11	45.84	34.95	10.89	5.50	5.39	1,929.55	21,010.82	82.91	81.24	
Jan-18	63.66	12.11	51.55	41.63	9.92	5.50	4.42	600.80	5,956.99	25.82	20.72	
Feb-18	62.18	12.11	50.07	39.31	10.76	5.50	5.26	4,431.20	47,680.30	190.40	182.10	
Mar-18	62.77	12.11	50.66	42.10	8.56	5.50	3.06	4,264.73	36,523.75	183.25	102.09	
Apr-18	66.33	11.50	54.83	41.06	13.76	5.50	8.26	925.68	12,738.03	39.78	59.74	
May-18	69.98	11.50	58.48	50.00	8.48	5.50	2.98	2,328.50	19,743.70	100.05	54.19	
Jun-18	67.32	11.50	55.82	45.71	10.11	5.50	4.61	1,510.00	15,273.54	64.89	54.44	
Jul-18	70.58	11.50	59.08	50.10	8.98	5.50	3.48	1,889.33	16,970.03	81.18	51.40	
Aug-18	67.85	11.50	56.35	49.74	6.61	5.50	1.11	1,683.13	11,117.77	72.32	14.54	
									\$ 3,932.89	\$ 2,059.41		

**Volume Allocation Issues:**

In 2018, the Commission noted discrepancies in reported volumes for Residue Gas and Plant Condensate processed through the Northwest Gas Processing facility. Residue Gas is derived from Rich Gas. Rich Gas is transported from wellheads through the Little Willow Gathering Facility. The Highway 30 Plant extracts Natural Gas Plant Liquids from Rich Gas. The remaining processed gas at the outlet of the Highway 30 Plant is Residue Gas. Plant Condensate is derived from Well Condensate.

AM Idaho was informed of the discrepancies and discovered a systematic error in an equation used in some steps of the allocation process, the process of allocating comingled sales volumes to individual wells which impacts royalties paid for individual leases. The error affected the volumes of Plant Condensate allocated to the gas and condensate streams leaving the Little Willow Facility and entering the Highway 30 Plant. Allocations of Natural Gas Plant Liquids were not affected by the error.

The error was a mismatched stream analysis reference within an equation. AM Idaho provided a schedule of corrected allocation volumes for residue gas and condensate (See Appendix E). Based on AM Idaho's reallocation process the following net condensate and gas MMBTUs were determined for the combined Audit Period and Supplemental Period:

Well	Condensate Volumes (Barrels)	Residue Gas Volumes (MMBTUs)
ML 1-10	(5)	(28)
ML 2-10	1,937	3,325
ML 3-10	1,148	3,349



Utilizing reported prices, AM Idaho identified an additional \$137,535 related to the additional volumes covering both the Audit Period and Supplemental Period owed to IDL (Specifically including adjustments beginning in January 2016 with adjustments through August 2018). The \$137,535 included the increased, allocated volumes multiplied by the updated pricing in this Report for condensate and residue gas. Finally, we multiplied the value associated with the additional allocated volumes by the royalty rate of .78125% and derived additional expected recovery of \$1,074.49. The updated allocated volumes all related to lease O-1996, and lease O-1983 volumes remain unchanged.

**Plant Fuel:**

Alta Mesa agreed with the recommendation to pay royalty for plant fuel volumes during the Audit Period. We have calculated plant fuel royalties payable during the Supplemental Period. Plant fuel royalty was calculated by multiplying volumes related to the wells allocated to lease O-01996 multiplied by the index pricing which was Rocky Mountain pipeline pricing south of Green River. The index pricing was utilized without deductions as AM Idaho utilized production volumes for fuel rather than purchasing fuel from a spot market and rather than selling its volumes with ARM. January 2018 plant volumes were not available, so royalty associated with January 2018 plant volumes are not included. Plant fuel royalties for the Supplemental Period are calculated as follows:

Production Month	Royalty Rate	Gross Plant Volumes	Price Rocky Mountains - Northwest S. of Green River Mo. Average	Plant Volume Royalty
Jan-17	0.0078125	1,682.40	3.16	41.57
Feb-17	0.0078125	1,485.35	2.60	30.17
Mar-17	0.0078125	1,537.05	2.51	30.18
Apr-17	0.0078125	1,609.87	2.71	34.05
May-17	0.0078125	1,850.74	2.75	39.69
Jun-17	0.0078125	1,518.80	2.56	30.33
Jul-17	0.0078125	1,662.18	2.53	32.90
Aug-17	0.0078125	1,443.07	2.56	28.88
Sep-17	0.0078125	1,660.74	2.69	34.85
Oct-17	0.0078125	1,553.24	2.55	30.96
Nov-17	0.0078125	1,689.95	2.70	35.69
Dec-17	0.0078125	1,773.51	2.52	34.96
Jan-18	0.0078125	Missing	2.93	
Feb-18	0.0078125	2173.5	2.29	38.93
Mar-18	0.0078125	3608.26	2.11	59.37
Apr-18	0.0078125	2,049.01	1.99	31.78
May-18	0.0078125	2572.57	1.79	35.91
Jun-18	0.0078125	2745.2	2.18	46.71
Jul-18	0.0078125	2324.29	2.39	43.48
Aug-18	0.0078125	2,585.68	2.48	50.09
Total				710.49

**Conclusion & Recommendations:**

Compliance Demand #1

Based on our understanding, AM Idaho has not undertaken an audit of ARM, nor do they intend to undertake an audit.

Compliance Demand #2

We understand that AM Idaho has paid \$106.89 for plant fuel during the Audit Period. AM Idaho should pay for plant fuel during the Supplemental Period totaling \$710.49 and for all future periods.

Compliance Demand #3

We also understand that AM Idaho has paid its \$58.61 remaining payable related to the Audit Period.

Compliance Demand #4

Complete resolution of this matter remains unclear due to the unique market conditions within Idaho. With AM Idaho providing documentation that has led to a clarification of the issues identified in Compliance Demand #5 and with the changes implemented by High Mesa moving forward as it relates to ARM; however, concerns related to arm's length transactions have been primarily addressed.

Compliance Demand #5 and Additional Volume Reconciliation

Finally, in order to comply with IDL's data request, AM Idaho has provided support for prices that it was to receive for ARM's sales efforts, and AM Idaho has provided support for transportation charges that have previously been deducted from IDL. We have identified the following amounts due to IDL related to pricing discrepancies:

<u>Amount</u>	<u>Description</u>
\$36,864.28	\$1.50/MCF transportation charge improperly deducted from IDL for residue gas
2,660.21	Additional unexplained discrepancies between confirmation index amounts and actual amounts received for residue gas
1,654.65	NGL price discrepancy between indexed contract amount and received amount during the Audit Period
1,405.15	NGL price discrepancy between indexed contract amount and received amount during the Supplemental Period
3,932.89	\$5.50/bbl transportation charge improperly deducted from IDL for condensate sales
2,059.41	Additional unexplained discrepancies between Big West contractual terms and received pricing for condensate sales
1,074.49	Royalty associated with additional allocated volumes multiplied by updated pricing for residue gas and condensate
710.49	Royalties associated with plant fuel volumes during the Supplemental Period
\$50,361.57	Total Variances

AM Idaho (and High Mesa going forward) should receive revenues in compliance with sales contracts entered into by ARM and then forward IDL its NRI share of the revenue streams. AM Idaho has apparently acknowledged that it improperly charged transportation charges from the field to the Northwest Gas Processing facility. AM Idaho acknowledges liability of \$48,594.38 related to the transportation charges improperly charged which is higher than the \$40,797.17 that we have calculated. Additionally, there are other unexplained pricing discrepancies between the third-party contracts and prices reported to IDL. Absent any valid deductions, IDL should be paid the difference related to these discrepancies.

Idaho Department of Lands

August 2, 2019

Page 10 of 10

Attachments:

- A. Notice of Default, dated October 26, 2018
- B. Response Letter from IDL dated January 31, 2019
- C1. Hydrocarbon Transportation Agreement Amendment
- C2. Sample Statement with \$1.50 Transport Charge
- D. Sample Monthly Natural Gas Trade Confirmation
- E. NGL Contract dated February 1, 2015
- F. NGL Contract dated February 25, 2016
- G. Big West Contract and Amendments
- H1. Marketing Agreement
- H2. Marketing Agreement Amendment



Attachment A  
(6 Pages)



STATE OF IDAHO

OFFICE OF THE ATTORNEY GENERAL

LAWRENCE G. WASDEN

October 26, 2018

AM Idaho LLC  
c/o F. David Murrell  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525875

AM Idaho LLC  
c/o Harlan Chappelle  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525868

**Re: Notice of Default**  
**Oil and Gas Lease No. O-01996**  
**Oil and Gas Lease No. O-01983**

Dear Messrs. Murrell and Chappelle:

On September 17, 2018, the Idaho Department of Lands ("IDL") delivered to each of you, on behalf of AM Idaho LLC, the enclosed demand letter requiring payment of delinquent royalties and the provision of specified documents and categories of documents. As of the date of this Notice of Default, IDL has not received any response to its September 17<sup>th</sup> demand letter. Consequently, this letter is the notice to AM Idaho LLC that it is in default of the State of Idaho, Oil and Gas Lease No. O-01996, dated June 1, 2016, and Oil and Gas Lease No. O-01983, dated June 1, 2006 (collectively "Leases").

In accordance with the terms of the Leases and Idaho Code § 47-809, AM Idaho LLC has ninety (90) days from the date of this Notice of Default to cure its defaults – by Thursday, January 24, 2019. In order to cure the outstanding defaults, AM Idaho must take the following actions:

1. Provide IDL payment of \$106.89 to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune LLC's reconciliation of volumes entering and leaving the processing plant.



2. Provide IDL payment of \$58.61 to compensate IDL for the royalties owed based on Opportune LLC's reconciliation of royalties payable and the actual payments made during the Audit Period.
3. Provide to IDL a detailed and verified written explanation of why ARM Energy Management LLC ("ARM") should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between AM Idaho LLC and ARM, or other documentation that proves the existence of arm's-length sales transactions between AM Idaho LLC and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between AM Idaho LLC and ARM. If there is not any written agreement between AM Idaho LLC and ARM describing how payments are calculated please verify this in writing.
4. Provide to IDL detailed statements, plant statements, reports or other documents that specify:
  - a. End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b. Each entity that ARM sold lease products to.
  - c. Each entity that transported the lease products.
  - d. Market location of where the lease products were sold.
5. Provide to IDL documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by AM Idaho LLC from the Leases, such as propane and ethane.

If AM Idaho LLC does not cure these defaults on or before January 24, 2019, IDL may terminate the Leases and begin eviction proceedings against AM Idaho LLC. Upon termination, AM Idaho LLC will be required to relinquish possession of the leased premises. AM Idaho LLC may also be required to remove its personal property and improvements located on the leased premises, or IDL may remove them at AM Idaho LLC's cost. Additionally, if further legal action is required to enforce the terms and conditions of the Leases, then IDL will seek to recover its reasonable costs and attorney's fees incurred, in addition to accruing pre- and post-judgment interest. If IDL obtains a judgment against AM Idaho LLC, it may be reported to any credit bureau.

While AM Idaho LLC is in default of the Leases, neither AM Idaho LLC, nor any entity it is an owner or member of will be eligible to assign any lease, sublease any leased premises, or enter into any new lease for any state lands for any purpose. If either or both Leases are terminated, new leases will be auctioned in a competitive auction process or through any other lawful lease or

disposal process. AM Idaho LLC will not be allowed to participate in any such auction as long as it continues to be in default of either or both Leases.

In order for the defaults to be cured, IDL must receive full payment, complete and correct copies of all responsive documents, and all information required above on or before January 24, 2019. Postmarks will not be considered. You may mail or deliver the materials to: Idaho Department of Lands; c/o Mike Murphy, Endowment Leasing; 300 North 6th St, Ste 103; P.O. Box 83720; Boise, Idaho 83720-0050.

If you have any question with regard to this Notice of Default or the actions required to cure the defaults, please contact me, or have your attorney contact me at (208) 334-2400, or via email at [joy.vega@ag.idaho.gov](mailto:joy.vega@ag.idaho.gov).

Regards,



JOY M. VEGA  
Deputy Attorney General

Encl. – Sept. 17, 2018 Demand w/o Audit Report

JMV:mb

Ecc: Dustin Miller, IDL Director  
Diane French, IDL Division Administrator, Lands and Waterways  
Mike Murphy, IDL Bureau Chief, Endowment Leasing



**DIVISION OF LANDS AND WATERWAYS  
ENDOWMENT LEASING BUREAU**  
300 N 6<sup>TH</sup> STREET, SUITE 103  
PO Box 83720  
BOISE, ID 83720-0050  
PHONE (208) 334-0200  
FAX (208) 334-3698



DAVID GROESCHL, DIRECTOR

**STATE BOARD OF LAND COMMISSIONERS**  
*C. L. "Butch" Otter, Governor  
Lawrence E. Denney, Secretary of State  
Lawrence G. Wasden, Attorney General  
Brandon D Woolf, State Controller  
Sherri Ybarra, Sup't of Public Instruction*

September 17, 2018

AM Idaho LLC  
Harlan Chappelle, Manager  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

AM Idaho LLC  
F. David Murrell, VP Land and Business Development  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

Re: Idaho Department of Lands Oil & Gas Leases, Audit Findings

Dear Messrs. Chappelle and Murrell:

On August 21, 2018, the Idaho Department of Lands ("IDL") presented the Idaho State Board of Land Commissioners ("Land Board") with the findings of a limited oil and gas lease royalty audit ("Audit Report") completed by IDL's contractor Opportune LLP ("Opportune") of Houston, Texas. The timeframe for the audit period covered August 2015 through December 2016 ("Audit Period"). During this Audit Period, AM Idaho, LLC ("Alta Mesa") reported royalty sales volumes, average prices received, and royalty payments due on three producing wells:

ML Investments 1-10, IDL Oil and Gas Lease O-01983  
ML Investments 2-10, IDL Oil and Gas Lease O-01983  
State 1-17, IDL Oil and Gas Lease O-01996

IDL submits this demand for information to its lessee, Alta Mesa, pursuant to IDL's authority under the lease terms; IDAPA 20.01.16 - Rules Governing Oil & Gas Leasing on Idaho State Lands; and Idaho Code §§ 47-802, 47-805, 47-809(a), 47-331, 47-333, and 47-332(4) which expressly requires that: "The lessee must maintain, for a period of five (5) years, and make available to the lessor upon request, copies of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of the amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records that the lessor may require to verify the gross production, disposition and market value."

IDL requires that Alta Mesa take the following actions, and provide the following information to IDL, in order to ensure that royalty amounts paid during the Audit Period comply with governing State statutes, rules, and lease terms:

1. Alta Mesa complete an audit of ARM Energy Management LLC ("ARM") to ensure that Alta Mesa is receiving, and thus paying royalties on, market value pricing for production of oil and gas from State endowment lands. Based on the Audit Report, the prices received by Alta Mesa from ARM are significantly lower than various regional market spot pricing identified by Opportune. IDL requires that the ARM audit include, but not be limited to the



following information: a) documentation of how prices received by Alta Mesa from ARM were determined; b) identification of all deductions, whether direct or indirect, related to transportation, marketing and processing costs; and c) identification of the market location where all lease products were sold or shipped for sale. IDL requires completion of the ARM audit within sixty 60 days from the date of this letter and that Alta Mesa provide IDL with a copy of the ARM audit.

2. Alta Mesa provide payment of \$106.89 within 30 days of the date of this letter to IDL to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune's reconciliation of volumes entering and leaving the processing plant. The "plant fuel," which is consumed "off the lease" and is subject to royalty payments, is different from "lease fuel" that is consumed "on the lease" that does not require royalty payments (IDAPA 20.03.16.045.01). IDL is also requiring Alta Mesa to report on, and pay, the appropriate royalties for any "plant fuel" consumed to date since the Audit Period, and continue to report on and pay royalties for all consumed "plant fuel."
3. Alta Mesa provide payment of \$58.61 within 30 days of the date of this letter to compensate IDL for the royalties owed based on Opportune's reconciliation of royalties payable and the actual payments made during the Audit Period.
4. Alta Mesa provide to IDL, within 30 days of the date of this letter, a detailed and verified written explanation of why ARM should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between Alta Mesa and ARM, or other documentation that proves the existence of arm's-length sales transactions between Alta Mesa and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between Alta Mesa and ARM. If there is not any written agreement between Alta Mesa and ARM describing how payments are calculated please verify this in writing.
5. Alta Mesa provide to IDL, within 30 days of this letter, detailed statements, plant statements, reports or other documents to IDL that specify:
  - a) End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b) Each entity that ARM sold lease products to.
  - c) Each entity that transported the lease products.
  - d) Market location of where the lease products were sold.
6. Alta Mesa provide to IDL, within 30 days of the date of this letter, documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by Alta Mesa from the leases, such as propane and ethane.

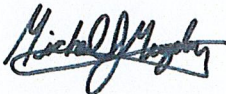


Harlan Chappelle  
David Murrell  
September 17, 2018  
Page 3

Enclosed is a copy of the Audit Report as provided by Opportune. IDL will continue to review the audit findings, with assistance from the Attorney Generals' Office, and may request additional information from Alta Mesa related to the audit findings and compliance with lease terms.

Please contact me if you have any questions regarding these requirements of Alta Mesa, as the state of Idaho's lessee. My e-mail is [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov) and my phone number is (208) 334-0290.

Respectfully,



Michael J. Murphy  
Bureau Chief – Endowment Leasing

Encl.: Opportune Audit Report

cc: Michael Christian, Attorney

Attachment B  
( 8 pages)



STATE OF IDAHO

OFFICE OF THE ATTORNEY GENERAL

LAWRENCE G. WASDEN

January 31, 2019

Mr. Michael Christian  
Marcus, Christian, Hardee & Davies, LLP  
737 N. 7<sup>th</sup> Street  
Boise, ID 83702

Via First Class Mail and  
Email: mchristian@mch-lawyer.com

**Re: State of Idaho, Oil and Gas Lease Nos. O-01996 and O-01983**

Dear Mr. Christian:

I am writing this correspondence on behalf of my client, the Idaho Department of Lands ("IDL"). On January 18, 2019, IDL received correspondence from you that presented AM Idaho LLC's ("Alta Mesa") proposal for resolving the October 26, 2018 Notice of Default of State of Idaho, Oil and Gas Lease Nos. O-01996 and O-01983. IDL issued the Notice of Default after Alta Mesa failed to provide any documents in response to IDL's September 17, 2018 demand letter. While my client and I appreciate the time and effort put forth by you and Alta Mesa to discuss a cure for the outstanding defaults, Alta Mesa has not yet produced any of the underlying documentation that IDL has repeatedly identified and demanded. Without such corroborating materials, IDL is unable to properly evaluate Alta Mesa's January 18<sup>th</sup> offer. Therefore, IDL rejects that offer.

In a final effort to allow Alta Mesa to cure its default, IDL hereby extends the deadline to cure by seven (7) calendar days from the date of this letter. Alta Mesa must deliver (postmarks will not be considered) complete and correct copies of all responsive materials itemized in paragraphs 3, 4, and 5 of the October 26, 2018 Notice of Default to IDL by the close of business on February 7, 2019. If this deadline expires and IDL does not receive the materials, IDL will move forward with a legal action against Alta Mesa.

Further, if Alta Mesa does not deliver the materials by the deadline, it will remain in default. The consequences of default include:

- Alta Mesa cannot assign any state lease.
- Alta Mesa cannot sublease any state leased premises.
- Alta Mesa cannot enter into any new lease for any state lands for any purpose.

Michael Christian  
January 31, 2019  
Page 2

For purposes of such eligibility Alta Mesa includes its individual members and any entity for which it is an owner, shareholder or member.

Please deliver the materials to: Idaho Department of Lands; c/o Mike Murphy, Endowment Leasing; 300 North 6th St, Ste 103; P.O. Box 83720; Boise, Idaho 83720-0050. If you have any questions regarding the actions required to cure the default, please contact me at (208) 334-2400, or via email at [joy.vega@ag.idaho.gov](mailto:joy.vega@ag.idaho.gov).

Regards,  
*/s/ Joy M. Vega*  
JOY M. VEGA  
Deputy Attorney General

Encl. – October 26, 2018 Notice of Default

JMV:mb

Ecc: Dustin Miller, IDL Director  
Diane French, IDL Division Administrator, Lands and Waterways  
Mike Murphy, IDL Bureau Chief, Endowment Leasing



STATE OF IDAHO

OFFICE OF THE ATTORNEY GENERAL

LAWRENCE G. WASDEN

October 26, 2018

AM Idaho LLC  
c/o F. David Murrell  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525875

AM Idaho LLC  
c/o Harlan Chappelle  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

*Via First Class Certified Mail*  
70131710000097525868

**Re: Notice of Default**  
**Oil and Gas Lease No. O-01996**  
**Oil and Gas Lease No. O-01983**

Dear Messrs. Murrell and Chappelle:

On September 17, 2018, the Idaho Department of Lands ("IDL") delivered to each of you, on behalf of AM Idaho LLC, the enclosed demand letter requiring payment of delinquent royalties and the provision of specified documents and categories of documents. As of the date of this Notice of Default, IDL has not received any response to its September 17<sup>th</sup> demand letter. Consequently, this letter is the notice to AM Idaho LLC that it is in default of the State of Idaho, Oil and Gas Lease No. O-01996, dated June 1, 2016, and Oil and Gas Lease No. O-01983, dated June 1, 2006 (collectively "Leases").

In accordance with the terms of the Leases and Idaho Code § 47-809, AM Idaho LLC has ninety (90) days from the date of this Notice of Default to cure its defaults – by Thursday, January 24, 2019. In order to cure the outstanding defaults, AM Idaho must take the following actions:

1. Provide IDL payment of \$106.89 to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune LLC's reconciliation of volumes entering and leaving the processing plant.

Natural Resources Division  
P.O. Box 83720, Boise, Idaho 83720-0010  
Telephone: (208) 334-2400, FAX: (208) 854-8072  
Located at 700 W. State Street  
Joe R. Williams Building, 2nd Floor



2. Provide IDL payment of \$58.61 to compensate IDL for the royalties owed based on Opportune LLC's reconciliation of royalties payable and the actual payments made during the Audit Period.
3. Provide to IDL a detailed and verified written explanation of why ARM Energy Management LLC ("ARM") should be found, by IDL, to be an arm's-length end purchaser; and every written agreement between AM Idaho LLC and ARM, or other documentation that proves the existence of arm's-length sales transactions between AM Idaho LLC and ARM or other purchasers or end purchasers. Alta Mesa's response to this request should detail the royalty rights outlined in the agreement(s) (whether written or verbal) between AM Idaho LLC and ARM. If there is not any written agreement between AM Idaho LLC and ARM describing how payments are calculated please verify this in writing.
4. Provide to IDL detailed statements, plant statements, reports or other documents that specify:
  - a. End-purchaser pricing of all oil and gas products produced from the leases. This pricing should include, but not be limited to the end-purchaser price of gas as it left the Hwy 30 Processing Facility and enters the NWGP, the end-purchaser price for oil (crude, NGLs, condensate or other hydrocarbons), and the end-purchaser price for NGLs and condensate after it has left the Hwy 30 Processing Facility.
  - b. Each entity that ARM sold lease products to.
  - c. Each entity that transported the lease products.
  - d. Market location of where the lease products were sold.
5. Provide to IDL documentation showing the disposition or disposal of the oil and gas products allegedly produced at a loss by AM Idaho LLC from the Leases, such as propane and ethane.

If AM Idaho LLC does not cure these defaults on or before January 24, 2019, IDL may terminate the Leases and begin eviction proceedings against AM Idaho LLC. Upon termination, AM Idaho LLC will be required to relinquish possession of the leased premises. AM Idaho LLC may also be required to remove its personal property and improvements located on the leased premises, or IDL may remove them at AM Idaho LLC's cost. Additionally, if further legal action is required to enforce the terms and conditions of the Leases, then IDL will seek to recover its reasonable costs and attorney's fees incurred, in addition to accruing pre- and post-judgment interest. If IDL obtains a judgment against AM Idaho LLC, it may be reported to any credit bureau.

While AM Idaho LLC is in default of the Leases, neither AM Idaho LLC, nor any entity it is an owner or member of will be eligible to assign any lease, sublease any leased premises, or enter into any new lease for any state lands for any purpose. If either or both Leases are terminated, new leases will be auctioned in a competitive auction process or through any other lawful lease or

AM Idaho LLC  
October 26, 2018  
Page 3

disposal process. AM Idaho LLC will not be allowed to participate in any such auction as long as it continues to be in default of either or both Leases.

In order for the defaults to be cured, IDL must receive full payment, complete and correct copies of all responsive documents, and all information required above on or before January 24, 2019. Postmarks will not be considered. You may mail or deliver the materials to: Idaho Department of Lands; c/o Mike Murphy, Endowment Leasing; 300 North 6th St, Ste 103; P.O. Box 83720; Boise, Idaho 83720-0050.

If you have any question with regard to this Notice of Default or the actions required to cure the defaults, please contact me, or have your attorney contact me at (208) 334-2400, or via email at joy.vega@ag.idaho.gov.

Regards,



JOY M. VEGA  
Deputy Attorney General

Encl. – Sept. 17, 2018 Demand w/o Audit Report

JMV:mb

Ecc: Dustin Miller, IDL Director  
Diane French, IDL Division Administrator, Lands and Waterways  
Mike Murphy, IDL Bureau Chief, Endowment Leasing

DIVISION OF LANDS AND WATERWAYS  
ENDOWMENT LEASING BUREAU  
300 N 6<sup>TH</sup> STREET, SUITE 103  
PO BOX 83720  
BOISE, ID 83720-0050  
PHONE (208) 334-0200  
FAX (208) 334-3698



DAVID GROESCHL, DIRECTOR

STATE BOARD OF LAND COMMISSIONERS  
*C. L. "Butch" Otter, Governor*  
*Lawrence E. Denney, Secretary of State*  
*Lawrence G. Wasden, Attorney General*  
*Brandon D Woolf, State Controller*  
*Sherri Ybarra, Supt of Public Instruction*

September 17, 2018

AM Idaho LLC  
Harlan Chappelle, Manager  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

AM Idaho LLC  
F. David Murrell, VP Land and Business Development  
15021 Katy Freeway, Ste. 400  
Houston, TX 77094-1813

Re: Idaho Department of Lands Oil & Gas Leases, Audit Findings

Dear Messrs. Chappelle and Murrell:

On August 21, 2018, the Idaho Department of Lands ("IDL") presented the Idaho State Board of Land Commissioners ("Land Board") with the findings of a limited oil and gas lease royalty audit ("Audit Report") completed by IDL's contractor Opportune LLP ("Opportune") of Houston, Texas. The timeframe for the audit period covered August 2015 through December 2016 ("Audit Period"). During this Audit Period, AM Idaho, LLC ("Alta Mesa") reported royalty sales volumes, average prices received, and royalty payments due on three producing wells:

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ML Investments 2-10, IDL Oil and Gas Lease O-01983  
State 1-17, IDL Oil and Gas Lease O-01996

IDL submits this demand for information to its lessee, Alta Mesa, pursuant to IDL's authority under the lease terms; IDAPA 20.01.16 - Rules Governing Oil & Gas Leasing on Idaho State Lands; and Idaho Code §§ 47-802, 47-805, 47-809(a), 47-331, 47-333, and 47-332(4) which expressly requires that: "The lessee must maintain, for a period of five (5) years, and make available to the lessor upon request, copies of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of the amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records that the lessor may require to verify the gross production, disposition and market value."

IDL requires that Alta Mesa take the following actions, and provide the following information to IDL, in order to ensure that royalty amounts paid during the Audit Period comply with governing State statutes, rules, and lease terms:

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Harlan Chappelle  
David Murrell  
September 17, 2018  
Page 2

following information: a) documentation of how prices received by Alta Mesa from ARM were determined; b) identification of all deductions, whether direct or indirect, related to transportation, marketing and processing costs; and c) identification of the market location where all lease products were sold or shipped for sale. IDL requires completion of the ARM audit within sixty 60 days from the date of this letter and that Alta Mesa provide IDL with a copy of the ARM audit.

2. Alta Mesa provide payment of \$106.89 within 30 days of the date of this letter to IDL to offset the royalties owed associated with the "plant fuel" consumed during the Audit Period as identified in the Audit Report based on Opportune's reconciliation of volumes entering and leaving the processing plant. The "plant fuel," which is consumed "off the lease" and is subject to royalty payments, is different from "lease fuel" that is consumed "on the lease" that does not require royalty payments (IDAPA 20.03.16.045.01). IDL is also requiring Alta Mesa to report on, and pay, the appropriate royalties for any "plant fuel" consumed to date since the Audit Period, and continue to report on and pay royalties for all consumed "plant fuel."
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  - c) Each entity that transported the lease products.
  - d) Market location of where the lease products were sold.
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Harlan Chappelle  
David Murrell  
September 17, 2018  
Page 3

Enclosed is a copy of the Audit Report as provided by Opportune. IDL will continue to review the audit findings, with assistance from the Attorney Generals' Office, and may request additional information from Alta Mesa related to the audit findings and compliance with lease terms.

Please contact me if you have any questions regarding these requirements of Alta Mesa, as the state of Idaho's lessee. My e-mail is [mmurphy@idl.idaho.gov](mailto:mmurphy@idl.idaho.gov) and my phone number is (208) 334-0290.

Respectfully,



Michael J. Murphy  
Bureau Chief – Endowment Leasing

Encl.: Opportune Audit Report

cc: Michael Christian, Attorney

**FIRST AMENDMENT  
TO HYDROCARBON TRANSPORTATION AGREEMENT**

This First Amendment to **Hydrocarbon Transportation Agreement** (this "Amendment") is made and entered into as of the first (1<sup>st</sup>) day of August, 2015 (the "Effective Date"), by and between ARM Energy Management, LLC, a Delaware limited liability company (the "Shipper"), and Northwest Gas Processing, LLC, a Delaware limited liability company (the "Carrier"). Shipper and Carrier may be referred to each individually as "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Shipper and Carrier entered into that certain Hydrocarbon Transportation Agreement dated February 1, 2015, (the "Transportation Agreement"); and

**WHEREAS**, Shipper and Carrier desire to amend such Transportation Agreement as provided herein.

**THEREFORE**, for and in consideration of the mutual covenants herein set forth, the Parties hereby agree to amend the Agreement effective as of the date first hereinabove written, as follows:

**SECTION 1. Terms Defined in Transportation Agreement.** As used in this Amendment, except as may otherwise be provided herein, all capitalized terms defined in the Transportation Agreement shall have the same meaning herein as therein, all of such terms and their definitions being incorporated herein by reference. The Transportation Agreement, as amended by this Amendment, is hereinafter called the "Agreement".

**SECTION 2. Amendments to Transportation Agreement.** Subject to the conditions precedent set forth in *Section 4* hereof:

Shipper and Carrier hereby agree to amend the Transportation Agreement as follows:

(a) Section 5.1 (b) is hereby deleted in its entirety and replaced with the following:

"(b) \$5.50 per Barrel for Crude Oil delivered to the Origin Point until the later of (i) January 31, 2016, or (ii) the date set forth in a written agreement between Shipper and Carrier which changes such dollar amount per Barrel (the "Crude Oil Transportation Fee")."

**SECTION 3. Effectiveness of Amendment.** The Crude Oil Transportation Fee that is amended under this Amendment shall be effective as of the Effective Date and shall apply to Crude Oil delivered on and after such date. The Parties hereby agree to make adjustments necessary or in such amount to reflect the foregoing.

**SECTION 4. Conditions of Effectiveness.** The obligations of Shipper and Carrier to amend the Transportation Agreement as provided herein are subject to the condition precedent

that each Party shall have delivered to the other Party duly executed counterparts of this Amendment.

**SECTION 5. Reference to and Effect on the Agreement.**

(a) Upon the effectiveness hereof, on and after the date hereof, each reference in the Transportation Agreement to "*this Agreement*," "*hereunder*," "*hereof*," "*herein*," or words of like import, shall mean and be a reference to the Transportation Agreement as amended hereby.

(b) Except as specifically amended by this Amendment, the Agreement shall remain in full force and effect and is hereby ratified and confirmed.

**SECTION 6. Extent of Amendment.** Except as otherwise expressly provided herein, the Agreement is not amended, modified or affected by this Amendment. Each Party hereby ratifies and confirms that except as herein changed; altered and amended, all terms, provisions, covenants and conditions contained in the Agreement shall remain in full force and effect. The terms and provisions hereof shall be binding upon and inure to the benefit of the Parties hereto, their heirs, representatives, successors and assigns.

**SECTION 7. Counterparts.** This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute but one and the same instrument. Delivery of an executed counterpart of this Amendment by facsimile or other electronic transmission (such as Portable Document Format) shall be equally as effective as delivery of a manually executed counterpart of this Amendment.

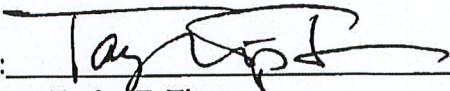
**SECTION 8. Integration.** THIS AGREEMENT REPRESENTS THE FINAL AGREEMENT AMONG THE PARTIES WITH RESPECT TO THE SUBJECT MATTERS SET FORTH HEREIN AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES.

**SECTION 9. GOVERNING LAW; CONSENT TO JURISDICTION AND VENUE; WAIVER OF JURY TRIAL; DISPUTE RESOLUTION.** This Amendment shall be governed by the laws of the State of Texas, excluding any conflicts of laws provisions calling for application of the laws of another state. **SECTIONS 10.2(B) (CONSENT TO JURISDICTION AND VENUE), 10.2(C) (WAIVER OF JURY TRIAL) AND 10.03 (DISPUTE RESOLUTION) OF THE TRANSPORTATION AGREEMENT ARE HEREBY INCORPORATED INTO THIS AMENDMENT, MUTATIS MUTANDIS, AS A PART HEREOF FOR ALL PURPOSES.**

**SECTION 14. Headings.** Section headings in this Amendment are included herein for convenience and reference only and shall not constitute a part of this Amendment for any other purpose.

**SHIPPER:**

ARM ENERGY MANAGEMENT, LLC,  
a Delaware limited liability company

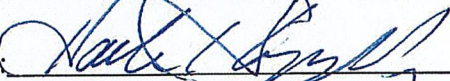
By: 

Name: Taylor T. Tipton

Title: President

**CARRIER:**

NORTHWEST GAS PROCESSING, LLC,  
a Delaware limited liability company

By: 

Name: Harlan H. Chappelle

Title: President

MAP



June 2017

Pipeline  
NWPL  
Location -  
Little  
Willow

Northwest Gas Processing Fees			
Northwest Gas Processing Fees			
Custody Transfer Meters:	MCF	Transportation Fee	Total Fees Due
Little Willow Transfer	293,500	\$ 1.50	\$ 440,250.00
DJS Custody Transfer	5,945	\$ 1.50	\$ 8,917.50

6/1/2017	6/1/2017	(10,000)	\$2.4350	(\$24,350.00)	
6/2/2017	6/2/2017	(10,000)	\$2.3750	(\$23,750.00)	
6/3/2017	6/5/2017	(30,000)	\$2.3300	(\$69,900.00)	Total Sales Dollars \$792,717.50
6/6/2017	6/6/2017	(10,000)	\$2.4850	(\$24,850.00)	Gas Fee \$ (449,167.50)
6/7/2017	6/7/2017	(11,000)	\$2.5450	(\$27,995.00)	Flash Gas Fee \$0.00
6/8/2017	6/8/2017	(11,000)	\$2.5700	(\$28,270.00)	Net Sales Dollars \$343,550.00
6/9/2017	6/9/2017	(11,000)	\$2.4850	(\$27,335.00)	
6/10/2017	6/12/2017	(33,000)	\$2.3850	(\$78,705.00)	Average Price \$1.0522
6/13/2017	6/13/2017	(11,000)	\$2.4400	(\$26,840.00)	
6/14/2017	6/14/2017	(10,500)	\$2.3250	(\$24,412.50)	(\$343,550.00)
6/15/2017	6/15/2017	(10,500)	\$2.4250	(\$25,462.50)	
6/16/2017	6/16/2017	(10,500)	\$2.4200	(\$25,410.00)	
6/17/2017	6/19/2017	(31,500)	\$2.5150	(\$79,222.50)	
6/20/2017	6/20/2017	(10,500)	\$2.3750	(\$24,937.50)	
6/21/2017	6/21/2017	(10,500)	\$2.4250	(\$25,462.50)	
6/22/2017	6/22/2017	(10,500)	\$2.5450	(\$26,722.50)	
6/23/2017	6/23/2017	(10,500)	\$2.4200	(\$25,410.00)	
6/24/2017	6/26/2017	(30,000)	\$2.4000	(\$72,000.00)	
6/27/2017	6/27/2017	(13,000)	\$2.4300	(\$31,590.00)	
6/28/2017	6/28/2017	(13,000)	\$2.4100	(\$31,330.00)	
6/29/2017	6/29/2017	(14,500)	\$2.4250	(\$35,162.50)	
6/30/2017	6/30/2017	(14,000)	\$2.4000	(\$33,600.00)	

NWPL				
Total		<b>(326,500)</b>		<b>(\$792,717.50)</b>

Attachment D  
(1 Page)



Transaction Confirmation

Deal # 70406

Buyer

Seller

AEM Trader Austen Adamcik Date 9/1/2015 Time 8:00 am  
Counterparty Alta Mesa Services, LP Trader Mike Phillips  
Baseload: Contract Price GDD, NW, s. of Green River /MMBtu

TERM

Delivery Period September 1, 2015 Through and including September 30, 2015

Performance Obligation and Contract Quantity

(Fixed Quantity):  
5,000 MMBtus/d

Delivery Point(s):

Point Name: East Hamilton Receipt Meter #: 771 Pipeline: Northwest Pipeline

Upstream Contract Number \_\_\_\_\_

Please Use Downstream Pkg ID: ARM

NAESB Executed

Confirming Party: ARM Energy Management, LLC

This Transaction Confirmation is subject to the Base Contract referenced between Seller and Buyer. The terms of this Transaction Confirmation are binding unless disputed in writing within 2 Business Days of receipt unless otherwise specified in the Base Contract.

Seller: <u>Alta Mesa Services, LP</u>	Buyer: <u>ARM Energy Management, LLC</u> <u>Russell Schneider</u>
By: <u>Michael A. Phillips</u>	By: <u>Austen Adamcik</u> <u>CAO</u>
Title: <u>Michael A. Phillips / Hydrocarbon</u>	Title: <u>Trader</u>
Date: <u>Sales and Marketing Manager</u>	Date: <u>9/1/2015</u>

09/10/2015

Attachment E  
(2 Pages)

FAXED AUG 10 2015



NGL Supply Co. Ltd.  
550, 436 - 4th Avenue, SW  
Calgary Alberta  
Canada  
T2P 3A8

**PURCHASE CONTRACT**

To: ARM Energy Management, LLC  
20329 State Highway 249  
Suite 450  
Houston Texas  
United States  
77070

Negotiated Date: February 1, 2015

Agreement: ARM Energy Management, LLC - NGL Supply Co., Purchase, 217655

Contract No: 19083P

Seller Contact  
ARM Energy Management, LLC  
Don Hamilton  
Phone: (720)408-4902 Fax: (720)408-4909

Buyer Contact  
NGL Supply Co. Ltd.  
Maurice Gratton - Marketer  
Phone: (403)515-3960 Fax: (403)265-1987  
Chris Skoog  
Phone: (303)839-1808 Fax: (303)715-0409  
Karen Williams - Accounting  
Phone: (403)515-3966 Fax: (403)265-1987

ARM Energy Management, LLC (Seller) agrees to sell and deliver, and NGL Supply Co. Ltd. (Buyer) agrees to purchase and accept as per the following:

**PRODUCT:** Y Grade Mix

**TOTAL CONTRACT QUANTITY:** 5,040,000 U.S. Gallons Approximately

**CONTRACT TERM:** February 01, 2015 to March 31, 2016

**PAYMENT TERMS:** 20th of Mth Following Delivery

**QUANTITY:** 5,040,000 U.S. Gallons Approximately

**DELIVERY POINT:** FOB Ontario ARM Alta Mesa Transload Facility, OR (also point of Title Transfer)

**EFFECTIVE DATE:** August 01, 2015 to March 31, 2016

**DELIVERY MODE:** Rall

**PRICE:** 19083P Y GRADE Price \$USD/U.S. Gallons.

**DELIVERY SCHEDULE: (Volumes in U.S. Gallons )**

Date	Volume	Date	Volume	Date	Volume	Date	Volume
Aug 15	630,000	Sep 15	630,000	Oct 15	630,000	Nov 15	630,000
Dec 15	630,000	Jan 16	630,000	Feb 16	630,000	Mar 16	630,000
Apr 16		May 16		Jun 16		Jul 16	

**SPECIAL TERMS:**

PRICING: OPIS CONWAY MONTH AVERAGE BY COMPONENT LESS \$.45 FOR CLEAR, CONFORMING, ON-SPEC Y GRADE

**PLEASE NOTE:**

- \* INITIAL PRODUCTION DELAYED UNTIL JUNE 21, 2015
- \* GALLONS METERED OFF AT DELIVERY LOCATION ARE THE GALLONS THAT NGL WILL GIVE CREDIT AND MAKE PAYMENT TO ARM OFF OF
- \* TOTAL VOLUME PRORATED FOR 500 BBL/DAY AUGUST 2015 (DELAYED DELAYED START) THROUGH MARCH 31, 2016. APPROXIMATELY 120,000 BBL (15,000 BBL/MONTH FOR 8 MONTHS)

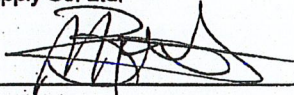
**PURCHASE CONTRACT**

Contract **217655-19083P**

**GENERAL TERMS AND CONDITIONS:**

Accepted and Agreed to this day by:

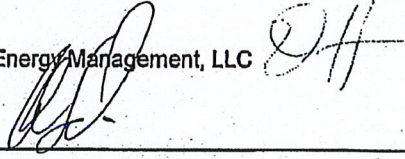
NGL Supply Co. Ltd.



Maurice Gratton

Date: 8/10/15

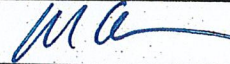
ARM Energy Management, LLC



Russell Schneider

Date: 8-4-15

Alta Mesa Services, LP



Michael A. McCabe

Chief Financial Officer

01/11/2016

*MAP*

Attachment F  
( 2 Pages )



NGL Supply Co. Ltd.  
550, 435 - 4th Avenue, SW  
Calgary Alberta  
Canada  
T2P 3A8

### PURCHASE CONTRACT

<b>To:</b> ARM Energy Management, LLC 20329 State Highway 249 Suite 450 Houston Texas United States 77070  <u>Seller Contact</u> ARM Energy Management, LLC Don Hamilton Phone: (720)408-4902 Fax: (720)408-4909	<b>Negotiated Date:</b> February 25, 2016  <b>Agreement:</b> ARM Energy Management, LLC - NGL Supply Co., Purchase, 217655  <b>Contract No:</b> 19291P  <u>Buyer Contact</u> NGL Supply Co. Ltd. Maurice Gratton - Marketer Phone: (403)515-3960 Fax: (403)265-1987 Chris Skoog Phone: (303)839-1806 Fax: (303)715-0409 Karen Willms - Accounting Phone: (403)515-3966 Fax: (403)265-1987
--	--

ARM Energy Management, LLC (Seller) agrees to sell and deliver, and NGL Supply Co. Ltd. (Buyer) agrees to purchase and accept as per the following:

<b>PRODUCT:</b>	Y Grade Mix
<b>TOTAL CONTRACT QUANTITY:</b>	9,000,000 U.S. Gallons Approximately
<b>CONTRACT TERM:</b>	February 25, 2016 to March 31, 2017
<b>PAYMENT TERMS:</b>	20th of Mth Following Delivery

<b>QUANTITY:</b>	9,000,000 U.S. Gallons Approximately
<b>DELIVERY POINT:</b>	FOB Ontario Energy Transport Transload Facility, OR (also point of Title Transfer)
<b>EFFECTIVE DATE:</b>	April 01, 2016 to March 31, 2017
<b>DELIVERY MODE:</b>	Rall
<b>PRICE:</b>	19291P Y Grade Price - OPIS Conway Month Average less \$0.3450us/usg per component \$USD/U.S. Gallons.

#### DELIVERY SCHEDULE: (Volumes in U.S. Gallons )

Date	Volume	Date	Volume	Date	Volume	Date	Volume
Apr 16	750,000	May 16	750,000	Jun 16	750,000	Jul 16	750,000
Aug 16	750,000	Sep 16	750,000	Oct 16	750,000	Nov 16	750,000
Dec 16	750,000	Jan 17	750,000	Feb 17	750,000	Mar 17	750,000



**PURCHASE CONTRACT**

**Contract 217655-19291P**

**SPECIAL TERMS:**

PRICING: OPIS CONWAY MONTH AVERAGE BY COMPONENT LESS \$.3450 Y GRADE

QUANTITY: 25 TANK CARS PER MONTH; 300 TANK CARS TOTAL

**PLEASE NOTE:**

\* GALLONS BASED ON OFFLOADED GALLONS AND OFFLOADED ANALYSIS. NGL AGREES TO PURCHASE LIQUIDS BY RAIL AND IN THE EVENT RAILCARS ARE NOT PROCURED OR SCHEDULED INTO ENERGY TRANSPORT IN A TIMELY ENOUGH MANNER, NGL AGREES TO MAINTAIN THAT SAME PURCHASE PRICE EVEN IF WE NEED TO MOVE PRODUCT OUT BY TRUCK DIRECTLY FROM THE HWY 30 NORTHWEST GAS PROCESSING PLANT

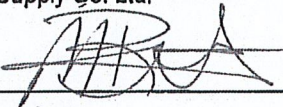
\* IF THERE IS A FAILURE IN OPERATIONS BY THE PLANT, OR BY THE ENERGY TRANSPORT TRANSLOADER, OR FAILURE BY ENERGY TRANSPORT TO ORDER IN OR CALL UP READILY AVAILABLE EMPTY CARS, THEN A NEW PURCHASE PRICE WOULD NEED TO BE RENEGOTIATED TO COVER THE ALTERNATIVE COST TO ROUTE THE PRODUCT TO MARKET

**GENERAL TERMS AND CONDITIONS:**

Accepted and Agreed to this day by:

NGL Supply Co. Ltd.

ARM Energy Management, LLC



Maurice Gratton

Don Hamilton

Date: 5/6/2016

Date: 4/14/2016

Alta Mesa Services, LP



Michael A. McCabe

Chief Financial Officer

06/27/2016

*MAP*





333 W. Center St • North Salt Lake City Utah 84054 • 801.296.7700 • www.bigwestoil.com

Date: October 19, 2015  
To: ARM Energy Management – Don Hamilton  
From: Big West Oil, LLC – Chace Larsen  
RE: ~~Purchase of Idaho Condensate~~  
Big West Oil Contract # P1170815

This Agreement is made between Big West Oil, LLC (Buyer) and ARM Energy Management (Seller), whereby Seller agrees to sell and deliver and Buyer agrees to purchase and receive condensate under the terms and conditions set forth on attachment A, attached hereto and which are hereby made a part of this Agreement.

Please execute and return one copy of this Agreement if it meets with your approval.

<sup>DS</sup>  
MB

Buyer:

Seller:

Signature:   
Chace Larsen

Signature: <sup>DocuSigned by:</sup> Russell Schneider  
CB02572C092440B...

<sup>DS</sup>  
Dt

Title: Crude Trader

Title: CAO

<sup>DS</sup>  
SF

Date: October 19, 2015

Date: 10/20/2015

Alta Mesa Services, LP

Michael A. McCabe

Chief Financial Officer

01/11/2016

MAP

## Attachment A

Term: August 1<sup>st</sup> to October 31<sup>st</sup>, 2015

Big West Oil shall have the right to cease this contract immediately if the crude oil/condensate delivered is deemed by Big West Oil to be inappropriate for its refinery, such determination to be made by Big West Oil, in its sole and absolute discretion.

Quantity: Stabilizer Plant Condensate = Approx. 400 bpd

See Attachment B

Price: All volumes purchased will be priced at NYMEX Light Sweet Crude Oil for the prompt month during the calendar month of delivery (trade days only).

A discount of \$12.68/bbl will be applied assuming the rail rate is \$4.43/bbl to move bbls to Big West Oil's North Salt Lake refinery yielding a delivered price of WTI CMA less \$8.25/bbl. Price may be adjusted when mutually agreed upon by both parties.

All applicable taxes will be applied

Quality: Alta Mesa Stabilizer Plant Condensate. The condensate is expected to be between 60-73 API, <0.1% Sulfur, and <0.5% BS&W with no contaminants (i.e. arsenic, metals, methanol, etc. All contaminants are to be defined by Big West Oil in its sole and absolute discretion).

Title: Title and risk of loss shall pass from Seller to Buyer when this material is delivered into Buyer's designated railcars at Ontario, OR transloading facility.

Payment: Payment due on the twentieth (20th) of the month following month of delivery. If the 20th falls on a Friday, holiday, or Saturday, the payment will be made on the last preceding business day. If payment date falls on a Sunday or Monday holiday, payment will be made on the following business day.

Payment will be made via wire transfer for 100% of the proceeds including all taxes.

Credit: Open credit

Assignment: The Contract shall extend to and be binding upon the successors and assigns of the Parties, but this Contract shall not be assigned or transferred by Buyer without the prior written consent Seller which shall not be unreasonably withheld.

Liability: In no event shall either party be liable for loss of profits or indirect, special, exemplary or punitive, or consequential damages.

Force Majeure: Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent that such failure is the result of an industry standard force majeure event that is beyond the control of such party.

GTC's: The terms stated in the ConocoPhillips General Provisions for Domestic Crude Oil Agreements effective January 1, 1993 ("GP"), attached hereto as Attachment A and incorporated herein by reference, will be used to the extent that they are not in conflict with any of the terms in this Exhibit A, provided, however:

(1) The parties do not agree to comply with the specific laws, orders or regulations identified in Paragraph C of the GP unless such party is otherwise subject to such laws, orders or regulations.

(2) In the first sentence of Paragraph E the phrase "acts in furtherance of the International Energy Program," shall be deleted. On the third line of the first sentence of Paragraph E, the following words shall be inserted between the word "by" and the word "war": "unplanned maintenance, operational disruption or breakdown, operational upsets resulting in reductions in crude charges, off-specification feed stock or products, catalyst problems or failures,".

(3) Paragraph G shall be replaced in its entirety with the following: "Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe that Buyer shall be unable to perform its obligations in connection with the Agreement, Seller may notify Buyer in writing of Seller's insecurity in which case Buyer shall have the option to either (i) pay cash in advance of taking delivery of any Crude Oil hereunder or (ii) post security reasonably satisfactory to Seller. In the event that Buyer fails to make any requested advance payment or provide sufficient security, Seller shall have the right to immediately terminate this Agreement but Buyer shall have no obligation to pay Seller the Settlement Amount in Paragraph H (3).

(4) Paragraph H (1) shall be amended to read as follows: "H. Termination: (1) If a party to this Agreement (a) becomes the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee or similar official, (b) becomes generally unable to pay its debts as they become due or (c) makes a general assignment for the benefit of creditors, then the other party to this Agreement (the "Terminating Party") may terminate this Agreement by giving written notice of termination. Such a termination shall be deemed to be effective immediately prior to any of the events described in clauses (a), (b) or (c) of this Section H (1). All references to "Liquidating Party" in this Paragraph H shall be replaced with "Terminating Party". Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the 'Settlement Amount' or 'Settlement Amounts') determined as provided in Paragraph (3) of this section." Paragraph H (3) shall be amended by adding to the end of the first sentence thereof the following: "discounted to present value at the time of payment using a discount rate equal to the interest rate determined under Paragraph F."

(5) The governing law set forth in Paragraph M of the GP shall be Utah law.

In the event of any claim, dispute or controversy arising out of or relating to this Agreement, including an action for declaratory relief, the prevailing party in such action or proceeding shall be entitled to recover its court costs and reasonable out-of-pocket expenses not limited to taxable costs, including but not limited to phone calls, photocopies, expert witness, travel, etc., and reasonable attorneys' fees to be fixed by the court. Such recovery shall include court costs, out-of-pocket expenses and attorneys' fees on appeal, if any. The court shall determine who the "prevailing party" is, whether or not the dispute or controversy proceeds to final judgment.

Because of the damage caused to refinery equipment, Big West Oil Company will not accept crude oil containing either chlorinated hydrocarbons, such as, but not limited to: carbon tetrachloride, dichloroethane, trichloroethylene, tetrachloroethylene, and 1,1,1, trichloroethane or oxygenated hydrocarbons such as but not limited to: Isopropyl alcohol, acetone, and glycol's. Any seller who delivers crude oil to Big West Oil Company containing such contaminants will be responsible for fees or additional charges resulting from Big West Oil Company's handling or disposal of the said unacceptable material.

Accounting: Katie Ecker  
(801) 296-7831

Big West Oil, LLC appreciates the opportunity to do business with ARM Energy Management. Please advise Buyer immediately if you are not in agreement with any of the above provisions by email or phone to Chace Larsen at (801) 296-7776 (chace.larsen@bigwestoil.com). If Seller does not receive a response within three business days, the terms and conditions set forth herein shall be considered binding upon both Buyer and Seller.

## Attachment B

<b>Idaho Well Analysis</b>				
Well Name		Volume (BPD)	API Gravity	Notes
ML Inv 1-10	Condy	65	63	
ML Inv 2-10	Condy	91	69	
ML Inv 1-11 UT	Crude	205	50	
ML Inv 1-11 LT	Crude	0	50	
DJS Prop 1-15	Condy	5	60	
Kauffman 1-9 LT	Crude	400	48	
Kauffman 1-9 UT	Crude	0	48	
Kauffman 1-34	Condy	50	70	
<b>Total Volume All Wells</b>		<b>816</b>		
<b>Weight Avg. All Wells</b>			<b>58.46</b>	All Crude
Kauffman 1-9 UT/Little Willow		400		
Kauffman 1-9 UT/Little Willow			48.00	Kauffman Only
<b>Hwy 30 Crude/Condy</b>		<b>416</b>		
<b>Weighted Average Hwy 30 Crude/Condy</b>			<b>58.71</b>	Pipeline Only (Sans Kauffman)



333 W. Center St • North Salt Lake City Utah 84054 • 801.296.7700 • www.bigwestoil.com

DS  
20/11  
DS  
SF

Date: October 5, 2016  
To: ARM Energy Management – Don Hamilton  
From: Big West Oil, LLC – Chace Larsen  
RE: Purchase of Idaho Condensate  
Big West Oil Contract # P1170815 – Amendment #1

This Agreement is made between Big West Oil, LLC (Buyer) and ARM Energy Management (Seller), whereby Seller agrees to sell and deliver and Buyer agrees to purchase and receive condensate under the terms and conditions set forth on attachment A, attached hereto and which are hereby made a part of this Agreement.

Please execute and return one copy of this Agreement if it meets with your approval.

Buyer:

Seller:

Signature:   
Daniel Bohman

DocuSigned by:  
Signature: Russell Schneider  
8300001CD28A177  
Russell Schneider

Title: VP of Crude Supply

Title: Chief Accounting Officer

Date: October 5, 2016

Date: October 12, 2016

Alta Mesa Services, LP

Michael A. McCabe

Chief Financial Officer

01/19/2017

MAP

## Attachment A

- Term:** November 1 - 30, 2016 and continuing on a 60 day evergreen contract until the first day of the month following 60 days advance written notice of termination.
- Big West Oil shall have the right to cease this contract immediately if the condensate delivered is deemed by Big West Oil to be inappropriate for its refinery, such determination to be made by Big West Oil, in its sole and absolute discretion.
- Quantity:** Stabilizer Plant Condensate = Approx. 450 bpd
- Price:** All volumes purchased will be priced at the NYMEX Light Sweet Crude Oil average for the prompt month during the calendar month of delivery (trade days only).
- A discount of \$12.93/bbl will be applied assuming the rail rate is \$4.43/bbl to move bbls to Big West Oil's North Salt Lake refinery yielding a delivered price of WTI CMA less \$8.50/bbl. Price may be adjusted due to cost adjustments made by railroad when mutually agreed upon by both parties.
- All applicable taxes will be applied
- Quality:** Alta Mesa Stabilizer Plant Condensate. The condensate is expected to be between 65-74 API, <0.1% Sulfur, and <0.5% BS&W with no contaminants (i.e. arsenic, metals, methanol, etc. All contaminants are to be defined by Big West Oil in its sole and absolute discretion).
- Title:** Title and risk of loss shall pass from Seller to Buyer when this material is delivered into Buyer's designated railcars at Ontario, OR transloading facility.
- Payment:** Payment due on the twentieth (20th) of the month following month of delivery. If the 20th falls on a Friday, holiday, or Saturday, the payment will be made on the last preceding business day. If payment date falls on a Sunday or Monday holiday, payment will be made on the following business day.
- Payment will be made via wire transfer for 100% of the proceeds including all taxes.
- Credit:** Open credit
- Assignment:** The Contract shall extend to and be binding upon the successors and assigns of the Parties, but this Contract shall not be assigned or transferred by Buyer without the prior written consent Seller which shall not be unreasonably withheld.
- Liability:** In no event shall either party be liable for loss of profits or indirect, special, exemplary or punitive, or consequential damages.
- Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent that such failure is the result of an industry standard force majeure event that is beyond the control of such party.
- GTC's:** The terms stated in the ConocoPhillips General Provisions for Domestic Crude Oil Agreements effective January 1, 1993 ("GP"), attached hereto as Attachment A and incorporated herein by reference, will be used to the extent that they are not in conflict with any of the terms in this Exhibit A, provided, however:
- (1) The parties do not agree to comply with the specific laws, orders or regulations identified in Paragraph C of the GP unless such party is otherwise subject to such laws, orders or regulations.



(2) In the first sentence of Paragraph E the phrase "acts in furtherance of the International Energy Program," shall be deleted. On the third line of the first sentence of Paragraph E, the following words shall be inserted between the word "by" and the word "war": "unplanned maintenance, operational disruption or breakdown, operational upsets resulting in reductions in crude charges, off-specification feed stock or products, catalyst problems or failures."

(3) Paragraph G shall be replaced in its entirety with the following: "Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe that Buyer shall be unable to perform its obligations in connection with the Agreement, Seller may notify Buyer in writing of Seller's insecurity in which case Buyer shall have the option to either (i) pay cash in advance of taking delivery of any Crude Oil hereunder or (ii) post security reasonably satisfactory to Seller. In the event that Buyer fails to make any requested advance payment or provide sufficient security, Seller shall have the right to immediately terminate this Agreement but Buyer shall have no obligation to pay Seller the Settlement Amount in Paragraph H (3).

(4) Paragraph H (1) shall be amended to read as follows: "H. Termination: (1) If a party to this Agreement (a) becomes the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee or similar official, (b) becomes generally unable to pay its debts as they become due or (c) makes a general assignment for the benefit of creditors, then the other party to this Agreement (the "Terminating Party") may terminate this Agreement by giving written notice of termination. Such a termination shall be deemed to be effective immediately prior to any of the events described in clauses (a), (b) or (c) of this Section H (1). All references to "Liquidating Party" in this Paragraph H shall be replaced with "Terminating Party". Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the 'Settlement Amount' or 'Settlement Amounts') determined as provided in Paragraph (3) of this section." Paragraph H (3) shall be amended by adding to the end of the first sentence thereof the following: "discounted to present value at the time of payment using a discount rate equal to the interest rate determined under Paragraph F."

(5) The governing law set forth in Paragraph M of the GP shall be Utah law.

In the event of any claim, dispute or controversy arising out of or relating to this Agreement, including an action for declaratory relief, the prevailing party in such action or proceeding shall be entitled to recover its court costs and reasonable out-of-pocket expenses not limited to taxable costs, including but not limited to phone calls, photocopies, expert witness, travel, etc., and reasonable attorneys' fees to be fixed by the court. Such recovery shall include court costs, out-of-pocket expenses and attorneys' fees on appeal, if any. The court shall determine who the "prevailing party" is, whether or not the dispute or controversy proceeds to final judgment.

Because of the damage caused to refinery equipment, Big West Oil Company will not accept crude oil containing either chlorinated hydrocarbons, such as, but not limited to: carbon tetrachloride, declorethane, trichloroethylene, tetrachlorethylene, and 1,1,1, trichloroethane or oxygenated hydrocarbons such as but not limited to: isopropyl alcohol, acetone, and glycol's. Any seller who delivers crude oil to Big West Oil Company containing such contaminants will be responsible for fees or additional charges resulting from Big West Oil Company's handling or disposal of the said unacceptable material.

Accounting: Katie Meyere  
(801) 296-7831

Big West Oil, LLC appreciates the opportunity to do business with ARM Energy Management. Please advise Buyer immediately if you are not in agreement with any of the above provisions by email or phone to Chace Larsen at (801) 296-7776 (chace.larsen@bigwestoil.com). If Seller does not receive a response within three business days, the terms and conditions set forth herein shall be considered binding upon both Buyer and Seller.



333 W. Center St • North Salt Lake City Utah 84054 • 801.296.7700 • www.bigwestoil.com

Date: May 24, 2017  
To: ARM Energy Management – Don Hamilton  
From: Big West Oil, LLC – Chace Larsen  
RE: Purchase of Idaho Condensate  
Big West Oil Contract # P1170815 – Amendment #2

This Agreement is made between Big West Oil, LLC (Buyer) and ARM Energy Management (Seller), whereby Seller agrees to sell and deliver and Buyer agrees to purchase and receive condensate under the terms and conditions set forth on attachment A, attached hereto and which are hereby made a part of this Agreement.

Please execute and return one copy of this Agreement if it meets with your approval.

Buyer:

Seller:

Signature: Daniel Bohman  
Daniel Bohman

Signature: Russell Schneider  
DocuSigned by:  
Russell Schneider  
8300901CD2BA477...

Title: VP of Crude Supply

Title: CAO

Date: May 24, 2017

Date: 6/7/17

DS  
DH

DS  
SP

Alta Mesa Services, LP  
MAV

Michael A. McCabe  
Chief Financial Officer  
08/24/2017

MAP

### Attachment A

**Term:** July 2017 through October 2017 and continuing on a 60 day evergreen contract until the first day of the month following 60 days advance written notice of termination.

Big West Oil shall have the right to cease this contract immediately if the condensate delivered is deemed by Big West Oil to be inappropriate for its refinery, such determination to be made by Big West Oil, in its sole and absolute discretion.

**Quantity:** Approx. 300 bpd for July and August and 150 bpd for September and October. BWO has the right to purchase the full ~300 bpd condensate volume from the plant in September and October as long as notice is provided in writing to ARM by 5pm <sup>MST</sup> on July 14, 2017. DLOS

**Price:** All volumes purchased will be priced at the NYMEX Light Sweet Crude Oil average for the prompt month during the calendar month of delivery (trade days only).

A discount of \$12.11/bbl will be applied assuming the rail rate is \$4.61/bbl to move bbls to Big West Oil's North Salt Lake refinery yielding a delivered price of WTI CMA less \$7.50/bbl. Price may be adjusted due to cost adjustments made by railroad when mutually agreed upon by both parties.

All applicable taxes will be applied

**Quality:** Alta Mesa Stabilizer Plant Condensate. The condensate is expected to be between 65-74 API, <0.1% Sulfur, and <0.5% BS&W with no contaminants (i.e. arsenic, metals, methanol, etc. All contaminants are to be defined by Big West Oil in its sole and absolute discretion).

**Title:** Title and risk of loss shall pass from Seller to Buyer when this material is delivered into Buyer's designated railcars at Ontario, OR transloading facility.

**Payment:** Payment due on the twentieth (20th) of the month following month of delivery. If the 20th falls on a Friday, holiday, or Saturday, the payment will be made on the last preceding business day. If payment date falls on a Sunday or Monday holiday, payment will be made on the following business day.

Payment will be made via wire transfer for 100% of the proceeds including all taxes.

**Credit:** Open credit

**Assignment:** The Contract shall extend to and be binding upon the successors and assigns of the Parties, but this Contract shall not be assigned or transferred by Buyer without the prior written consent Seller which shall not be unreasonably withheld.

**Liability:** In no event shall either party be liable for loss of profits or indirect, special, exemplary or punitive, or consequential damages.

**Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent that such failure is the result of an industry standard force majeure event that is beyond the control of such party.

**GTC's:** The terms stated in the ConocoPhillips General Provisions for Domestic Crude Oil Agreements effective January 1, 1993 ("GP"), attached hereto as Attachment B and incorporated herein by reference, will be used to the extent that they are not in conflict with any of the terms in this Exhibit A, provided, however:

(1) The parties do not agree to comply with the specific laws, orders or regulations identified in Paragraph C of the GP unless such party is otherwise subject to such laws, orders or regulations.

(2) In the first sentence of Paragraph E the phrase "acts in furtherance of the International Energy Program," shall be deleted. On the third line of the first sentence of Paragraph E, the following words shall be inserted between the word "by" and the word "war": "unplanned maintenance, operational disruption or breakdown, operational upsets resulting in reductions in crude charges, off-specification feed stock or products, catalyst problems or failures,".

(3) Paragraph G shall be replaced in its entirety with the following: "Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe that Buyer shall be unable to perform its obligations in connection with the Agreement, Seller may notify Buyer in writing of Seller's insecurity in which case Buyer shall have the option to either (i) pay cash in advance of taking delivery of any Crude Oil hereunder or (ii) post security reasonably satisfactory to Seller. In the event that Buyer fails to make any requested advance payment or provide sufficient security, Seller shall have the right to immediately terminate this Agreement but Buyer shall have no obligation to pay Seller the Settlement Amount in Paragraph H (3).

(4) Paragraph H (1) shall be amended to read as follows: "H. Termination: (1) If a party to this Agreement (a) becomes the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee or similar official, (b) becomes generally unable to pay its debts as they become due or (c) makes a general assignment for the benefit of creditors, then the other party to this Agreement (the "Terminating Party") may terminate this Agreement by giving written notice of termination. Such a termination shall be deemed to be effective immediately prior to any of the events described in clauses (a), (b) or (c) of this Section H (1). All references to "Liquidating Party" in this Paragraph H shall be replaced with "Terminating Party". Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the 'Settlement Amount' or 'Settlement Amounts') determined as provided in Paragraph (3) of this section." Paragraph H (3) shall be amended by adding to the end of the first sentence thereof the following: "discounted to present value at the time of payment using a discount rate equal to the interest rate determined under Paragraph F."

(5) The governing law set forth in Paragraph M of the GP shall be Utah law.

In the event of any claim, dispute or controversy arising out of or relating to this Agreement, including an action for declaratory relief, the prevailing party in such action or proceeding shall be entitled to recover its court costs and reasonable out-of-pocket expenses not limited to taxable costs, including but not limited to phone calls, photocopies, expert witness, travel, etc., and reasonable attorneys' fees to be fixed by the court. Such recovery shall include court costs, out-of-pocket expenses and attorneys' fees on appeal, if any. The court shall determine who the "prevailing party" is, whether or not the dispute or controversy proceeds to final judgment.

Because of the damage caused to refinery equipment, Big West Oil Company will not accept crude oil containing either chlorinated hydrocarbons, such as, but not limited to: carbon tetrachloride, declorethane, trichloroethylene, tetrachlorethylene, and 1,1,1, trichloroethane or oxygenated hydrocarbons such as but not limited to: isopropyl alcohol, acetone, and glycol's. Any seller who delivers crude oil to Big West Oil Company containing such contaminants will be responsible for fees or additional charges resulting from Big West Oil Company's handling or disposal of the said unacceptable material.

Accounting: Katie Wicker  
(801) 296-7832

Big West Oil, LLC appreciates the opportunity to do business with ARM Energy Management. Please advise Buyer immediately if you are not in agreement with any of the above provisions by email or phone to Chace Larsen at (801) 296-7776 (chace.larsen@bigwestoil.com). If Seller does not receive a response within three business days, the terms and conditions set forth herein shall be considered binding upon both Buyer and Seller.

Attachment B

GENERAL PROVISIONS  
DOMESTIC CRUDE OIL AGREEMENTS

(JANUARY 1, 1993 CONOCOPHILLIPS GENERAL PROVISIONS FOR  
DOMESTIC CRUDE OIL AGREEMENTS)

**A. Measurement and Tests:** All measurements hereunder shall be made from static tank gauges on 100 percent tank table basis or by positive displacement meters. All measurements and tests shall be made in accordance with the latest ASTM or ASME-API (Petroleum PD Meter Code) published methods then in effect, whichever apply. Volume and gravity shall be adjusted to 60 degrees Fahrenheit by the use of Table 6A and 5A of the Petroleum Measurement Tables ASTM Designation D1250 in their latest revision. The crude oil delivered hereunder shall be marketable and acceptable in the applicable common or segregated stream of the carriers involved but not to exceed 1% S&W. Full deduction for all free water and S&W content shall be made according to the API/ASTM Standard Method then in effect. Either party shall have the right to have a representative witness all gauges, tests and measurements. In the absence of the other party's representative, such gauges, tests and measurements shall be deemed to be correct.

**B. Warranty:** The Seller warrants good title to all crude oil delivered hereunder and warrants that such crude oil shall be free from all royalties, liens, encumbrances and all applicable foreign, federal, state and local taxes.

Seller further warrants that the crude oil delivered shall not be contaminated by chemicals foreign to virgin crude oil including, but not limited to chlorinated and/or oxygenated hydrocarbons and lead. Buyer shall have the right, without prejudice to any other remedy available to Buyer, to reject and return to Seller any quantities of crude oil which are found to be so contaminated, even after delivery to Buyer.

**C. Rules and Regulations:** The terms, provisions and activities undertaken pursuant to this Agreement shall be subject to all applicable laws, orders and regulations of all governmental authorities. If at any time a provision hereof violates any such applicable laws, orders or regulations, such provision shall be voided and the remainder of the Agreement shall continue in full force and effect unless terminated by either party upon giving written notice to the other party hereto. If applicable, the parties hereto agree to comply with all provisions (as amended) of the Equal Opportunity Clause prescribed in 41 C.F.R. 60-1.4; the Affirmative Action Clause for disabled veterans and veterans of the Vietnam Era prescribed in 41 C.F.R. 60-250.4; the Affirmative Action Clause for Handicapped Workers prescribed in 41 C.F.R. 60-741.4; 48 C.F.R. Chapter 1 Subpart 19.7 regarding Small Business and Small Disadvantaged Business Concerns; 48 C.F.R. Chapter 1 Subpart 20.3 regarding Utilization of Labor Surplus Area Concerns; Executive Order 12138 and regulations thereunder regarding subcontracts to women-owned business concerns; Affirmative Action Compliance Program (41 C.F.R. 60-1.40); annually file SF-100 Employer Information Report (41 C.F.R. 60-1.7); 41 C.F.R. 60-1.8 prohibiting segregated facilities; and the Fair Labor Standards Act of 1938 as amended, all of which are incorporated in this Agreement by reference.

**D. Hazard Communication:** Seller shall provide its Material Safety Data Sheet ("MSDS") to Buyer. Buyer acknowledges the hazards and risks in handling and using crude oil. Buyer shall read the MSDS and advise its employees, its affiliates, and third parties, who may purchase or come into contact with such crude oil, about the hazards of crude oil, as well as the precautionary procedures for handling said crude oil, which are set forth in such MSDS and any supplementary MSDS or written warning(s) which Seller may provide to Buyer from time to time.

**E. Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent such failure is occasioned by war, riots, insurrections, fire, explosions, sabotage, strikes, and other labor or industrial disturbances, acts of God or the elements, governmental laws, regulations, or requests, acts in furtherance of the International Energy Program, disruption or breakdown of production or transportation facilities, delays of pipeline carrier in receiving and delivering crude oil tendered, or by any other cause, whether similar or not, reasonably beyond the control of such party. Any such failures to perform shall be remedied with all reasonable dispatch, but neither party shall be required to supply substitute quantities from other sources of supply. Failure to perform due to events of Force Majeure shall not extend the terms of this Agreement.

Notwithstanding the above, and in the event that the Agreement is an associated purchase/sale, or exchange of crude oil, the parties shall have the rights and obligations described below in the circumstances described below:

(1) If, because of Force Majeure, the party declaring Force Majeure (the "Declaring Party") is unable to deliver part or all of the quantity of crude oil which the Declaring Party is obligated to deliver under the Agreement or associated contract, the other party (the "Exchange Partner") shall have the right but not the obligation to reduce its deliveries of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to deliver.

(2) If, because of Force Majeure, the Declaring Party is unable to take delivery of part or all of the quantity of crude oil to be delivered by the Exchange Partner under the Agreement or associated contract, the Exchange Partner shall have the right but not the obligation to reduce its receipts of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to take delivery of.

**F. Payment:** Unless otherwise specified in the Special Provisions of this Agreement, Buyer agrees to make payment against Seller's invoice for the crude oil purchased hereunder to a bank designated by Seller in U.S. dollars by telegraphic transfer in immediately available funds. Unless otherwise specified in the Special Provisions of this Agreement, payment will be due on or before the 20th of the month following the month of delivery. If payment due date is on a Saturday or New York bank holiday other than Monday, payment shall be due on the preceding New York banking day. If payment due date is on a Sunday or a Monday New York bank holiday, payment shall be due on the succeeding New York banking day.

Payment shall be deemed to be made on the date good funds are credited to Seller's account at Seller's designated bank.

In the event that Buyer fails to make any payment when due, Seller shall have the right to charge interest on the amount of the overdue payment at a per annum rate which shall be two percentage points higher than the published prime lending rate of Morgan Guaranty Trust Company of New York on the date payment was due, but not to exceed the maximum rate permitted by law.

**G. Financial Responsibility:** Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe it necessary to assure payment, Seller may at any time require, by written notice to Buyer, advance cash payment or satisfactory security in the form of a Letter or Letters of Credit at Buyer's expense in a form and from a bank acceptable to Seller to cover any or all deliveries of crude oil. If Buyer does not provide the Letter of Credit on or before the date specified in Seller's notice under this section, Seller or Buyer may terminate this Agreement forthwith. However, if a Letter of Credit is required under the Special Provisions of this Agreement and Buyer does not provide same, then Seller only may terminate this Agreement forthwith. In no event shall Seller be obligated to schedule or complete delivery of the crude oil until said Letter of Credit is found acceptable to Seller. Each party may offset any payments or deliveries due to the other party under this or any other agreement between the parties.

If a party to this Agreement (the "Defaulting Party") should (1) become the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee, or similar official, (2) become generally unable to pay its debts as they become due, or (3) make a general assignment for the benefit of creditors, the other party to this Agreement may withhold shipments without notice.

**H. Liquidation:**

(1) **Right to Liquidate.** At any time after the occurrence of one or more of the events described in the third paragraph of Section G, Financial Responsibility, the other party to the Agreement (the "Liquidating Party") shall have the right, at its sole discretion, to liquidate this Agreement by terminating this Agreement. Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the "Settlement Amount" or "Settlement Amounts") determined as provided in Paragraph (3) of this section.

(2) **Multiple Deliveries.** If this Agreement provides for multiple deliveries of one or more types of crude oil in the same or different delivery months, or for the purchase or exchange of crude oil by the parties, all deliveries under this Agreement to the same party at the same delivery location during a particular delivery month shall be considered a single commodity transaction ("Commodity Transaction") for the purpose of determining the Settlement Amount(s). If the Liquidating Party elects to liquidate this Agreement, the Liquidating Party must terminate all Commodity Transactions under this Agreement.

(3) **Settlement Amount.** With respect to each terminated Commodity Transaction, the Settlement Amount shall be equal to the contract quantity of crude oil, multiplied by the difference between the contract price per barrel specified in this Agreement (the "Contract Price") and the market price per barrel of crude oil on the date the Liquidating Party terminates this Agreement (the "Market Price"). If the Market Price exceeds the Contract Price in a Commodity Transaction, the selling party shall pay the Settlement Amount to the buying



party. If the Market Price is less than the Contract Price in a Commodity Transaction, the buying party shall pay the Settlement Amount to the selling party. If the Market Price is equal to the Contract Price in a Commodity Transaction, no Settlement Amount shall be due.

(4) **Termination Date.** For the purpose of determining the Settlement Amount, the date on which the Liquidating Party terminates this Agreement shall be deemed to be (a) the date on which the Liquidating Party sends written notice of termination to the Defaulting Party, if such notice of termination is sent by telex or facsimile transaction; or (b) the date on which the Defaulting Party receives written notice of termination from the Liquidating Party, if such notice of termination is given by United States mail or a private mail delivery service.

(5) **Market Price.** Unless otherwise provided in this Agreement, the Market Price of crude oil sold or exchanged under this Agreement shall be the price for crude oil for the delivery month specified in this Agreement and at the delivery location that corresponds to the delivery location specified in this Agreement, as reported in Platt's Oilgram Price Report ("Platt's") for the date on which the Liquidating Party terminates this Agreement. If Platt's reports a range of prices for crude oil on that date, the Market Price shall be the arithmetic average of the high and low prices reported by Platt's. If Platt's does not report prices for the crude oil being sold under this Agreement, the Liquidating Party shall determine the Market Price of such crude oil in a commercially reasonable manner, unless otherwise provided in this Agreement.

(6) **Payment of Settlement Amount.** Any Settlement Amount due upon termination of this Agreement shall be paid in immediately available funds within two business days after the Liquidating Party terminates this Agreement. However, if this Agreement provides for more than one Commodity Transaction, or if Settlement Amounts are due under other agreements terminated by the Liquidating Party, the Settlement Amounts due to each party for such Commodity Transactions and/or agreements shall be aggregated. The party owing the net amount after such aggregation shall pay such net amount to the other party in immediately available funds within two business days after the date on which the Liquidating Party terminates this Agreement.

(7) **Miscellaneous.** This section shall not limit the rights and remedies available to the Liquidating Party by law or under other provisions of this Agreement. The parties hereby acknowledge that this Agreement constitutes a forward contract for purposes of Section 556 of the U.S. Bankruptcy Code.

**I. Equal Daily Deliveries:** For pricing purposes only, unless otherwise specified in the Special Provisions, all crude oil delivered hereunder during any calendar month shall be considered to have been delivered in equal daily quantities during such month.

**J. Exchange Balancing:** If volumes are exchanged, each party shall be responsible for maintaining the exchange in balance on a month-to-month basis, as near as pipeline or other transportation conditions will permit. In all events upon termination of this Agreement and after all monetary obligations under this Agreement have been satisfied, any volume imbalance existing at the conclusion of this Agreement of less than 1,000 barrels will be declared in balance. Any volume imbalance of 1,000 barrels or more, limited to the total contract volume, will be settled by the underdelivering party making delivery of the total volume imbalance in accordance with the delivery provisions of this Agreement applicable to the underdelivering party, unless mutually agreed to the contrary. The request to schedule all volume imbalances must be confirmed in writing by one party or both parties. Volume imbalances confirmed by the 20th of the month shall be delivered during the calendar month after the volume imbalance is confirmed. Volume imbalances confirmed after the 20th of the month shall be delivered during the second calendar month after the volume imbalance is confirmed.

**K. Delivery, Title, and Risk of Loss:** Delivery, title, and risk of loss of the crude oil delivered hereunder shall pass from Seller to Buyer as follows: For lease delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the Seller's lease/unit storage tanks or processing facilities to the Buyer's carrier. Title to and risk of loss of the crude oil shall pass from Seller to Buyer at the point of delivery. For delivery locations other than lease/unit delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the delivery facility designated by the Seller to the Buyer's carrier. If delivery is by in-line transfer, delivery of the crude oil to the Buyer shall be effected at the particular pipeline facility designated in this Agreement. Title to and risk of loss of the crude oil shall pass from the Seller to the Buyer upon delivery.

**L. Term:** Unless otherwise specified in the Special Provisions, delivery months begin at 7:00 a.m. on the first day of the calendar month and end at 7:00 a.m. on the first day of the following calendar month.

**M. Governing Law:** This Agreement and any disputes arising hereunder shall be governed by the laws of the State of Texas.

11. ~~Necessary Documents.~~ Upon request, each party agrees to furnish all substantiating documents incident to the transaction, including a Delivery Ticket for each volume delivered and an invoice for any month in which the sums are due.

**O. Waiver:** No waiver by either party regarding the performance of the other party under any of the provisions of this Agreement shall be construed as a waiver of any subsequent performance under the same or any other provisions.

**P. Assignment:** Neither party shall assign this Agreement or any rights hereunder without the written consent of the other party unless such assignment is made to a person controlling, controlled by or under common control of assignor, in which event assignor shall remain responsible for nonperformance.

**Q. Entirety of Agreement:** The Special Provisions and these General Provisions contain the entire Agreement of the parties; there are no other promises, representations or warranties. Any modification of this Agreement shall be by written instrument. Any conflict between the Special Provisions and these General Provisions shall be resolved in favor of the Special Provisions. The section headings are for convenience only and shall not limit or change the subject matter of this Agreement.

**R. Definitions:** When used in this Agreement, the terms listed below have the following meanings:

- "API" means the American Petroleum Institute.
- "ASME" means the American Society of Mechanical Engineers.
- "ASTM" means the American Society for Testing Materials.
- "Barrel" means 42 U.S. gallons of 231 cubic inches per gallon corrected to 60 degrees Fahrenheit.
- "Carrier" means a pipeline, barge, truck, or other suitable transporter of crude oil.
- "Crude Oil" means crude oil or condensate, as appropriate.
- "Day," "month," and "year" mean, respectively, calendar day, calendar month, and calendar year, unless otherwise specified.
- "Delivery Ticket" means a shipping/loading document or documents stating the type and quality of crude oil delivered, the volume delivered and method of measurement, the corrected specific gravity, temperature, and S&W content.
- "Invoice" means a statement setting forth at least the following information: The date(s) of delivery under the transaction; the location(s) of delivery; the volume(s); price(s); the specific gravity and gravity adjustments to the price(s) (where applicable); and the term(s) of payment.
- "S&W" means sediment and water.



323 W. Center St • North Salt Lake City Utah 84054 • 801.295.7700 • www.bigwestoil.com

Date: March 14, 2018  
To: ARM Energy Management – Thornton Tucker  
From: Big West Oil, LLC – Chace Larsen  
RE: Purchase of Idaho Condensate  
Big West Oil Contract # P1170815 – Amendment #3

This Agreement is made between Big West Oil, LLC (Buyer) and ARM Energy Management (Seller), whereby Seller agrees to sell and deliver and Buyer agrees to purchase and receive condensate under the terms and conditions set forth on attachment A, attached hereto and which are hereby made a part of this Agreement.

Please execute and return one copy of this Agreement if it meets with your approval.

Buyer:

Seller:

Signature: [Handwritten Signature]  
Rocky Edelman

Signature: [Handwritten Signature]

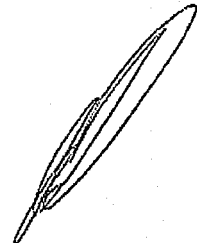
Title: President of Commercial Operations

Title: SVP, Head of Crude Marketing

Date: March 27, 2018

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

22



High Mesa Holdings, LP  
MA  
Michael A. McCabe  
Chief Financial Officer  
06/12/2018

## Attachment A

- Term:** April 2018 through March 2019 and continuing on a 60 day evergreen contract until the first day of the month following 60 days advance written notice of termination.
- Big West Oil shall have the right to cease this contract immediately if the condensate delivered is deemed by Big West Oil to be inappropriate for its refinery, such determination to be made by Big West Oil, in its sole and absolute discretion.
- Quantity:** Approx. 225 bpd. Big West Oil will provide the railcars to keep produced condensate moving up to 275 bpd. Any additional volume may be added to the contract if mutually agreed upon by Buyer and Seller.
- Price:** All volumes purchased will be priced at the NYMEX Light Sweet Crude Oil average for the prompt month during the calendar month of delivery (trade days only) minus \$11.50/bbl.
- All applicable taxes will be applied
- Quality:** Alta Mesa Stabilizer Plant Condensate. The condensate is expected to be between 65-74 API, <0.1% Sulfur, and <0.5% BS&W with no contaminants (i.e. arsenic, metals, methanol, etc. All contaminants are to be defined by Big West Oil in its sole and absolute discretion).
- Title:** Title and risk of loss shall pass from Seller to Buyer when this material is delivered into Buyer's designated railcars at Ontario, OR transloading facility.
- Payment:** Payment due on the twentieth (20th) of the month following month of delivery. If the 20th falls on a Friday, holiday, or Saturday, the payment will be made on the last preceding business day. If payment date falls on a Sunday or Monday holiday, payment will be made on the following business day.
- Payment will be made via wire transfer for 100% of the proceeds including all taxes.
- Credit:** Open credit
- Assignment:** The Contract shall extend to and be binding upon the successors and assigns of the Parties, but this Contract shall not be assigned or transferred by Buyer without the prior written consent Seller which shall not be unreasonably withheld.
- Liability:** In no event shall either party be liable for loss of profits or indirect, special, exemplary or punitive, or consequential damages.
- Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent that such failure is the result of an industry standard force majeure event that is beyond the control of such party.
- GTC's:** The terms stated in the ConocoPhillips General Provisions for Domestic Crude Oil Agreements effective January 1, 1993 ("GP"), attached hereto as Attachment B and incorporated herein by reference, will be used to the extent that they are not in conflict with any of the terms in this Exhibit A, provided, however:
- (1) The parties do not agree to comply with the specific laws, orders or regulations identified in Paragraph C of the GP unless such party is otherwise subject to such laws, orders or regulations.
- (2) In the first sentence of Paragraph E the phrase "acts in furtherance of the International Energy Program," shall be deleted. On the third line of the first sentence of Paragraph E, the following words shall be inserted between the word "by" and the word "war": "unplanned

maintenance, operational disruption or breakdown, operational upsets resulting in reductions in crude charges, off-specification feed stock or products, catalyst problems or failures."

(3) Paragraph G shall be replaced in its entirety with the following: "Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe that Buyer shall be unable to perform its obligations in connection with the Agreement, Seller may notify Buyer in writing of Seller's insecurity in which case Buyer shall have the option to either (i) pay cash in advance of taking delivery of any Crude Oil hereunder or (ii) post security reasonably satisfactory to Seller. In the event that Buyer fails to make any requested advance payment or provide sufficient security, Seller shall have the right to immediately terminate this Agreement but Buyer shall have no obligation to pay Seller the Settlement Amount in Paragraph H (3).

(4) Paragraph H (1) shall be amended to read as follows: "H. Termination: (1) If a party to this Agreement (a) becomes the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee or similar official, (b) becomes generally unable to pay its debts as they become due or (c) makes a general assignment for the benefit of creditors, then the other party to this Agreement (the "Terminating Party") may terminate this Agreement by giving written notice of termination. Such a termination shall be deemed to be effective immediately prior to any of the events described in clauses (a), (b) or (c) of this Section H (1). All references to "Liquidating Party" in this Paragraph H shall be replaced with "Terminating Party". Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the 'Settlement Amount' or 'Settlement Amounts') determined as provided in Paragraph (3) of this section." Paragraph H (3) shall be amended by adding to the end of the first sentence thereof the following: "discounted to present value at the time of payment using a discount rate equal to the interest rate determined under Paragraph F."

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In the event of any claim, dispute or controversy arising out of or relating to this Agreement, including an action for declaratory relief, the prevailing party in such action or proceeding shall be entitled to recover its court costs and reasonable out-of-pocket expenses not limited to taxable costs, including but not limited to phone calls, photocopies, expert witness, travel, etc., and reasonable attorneys' fees to be fixed by the court. Such recovery shall include court costs, out-of-pocket expenses and attorneys' fees on appeal, if any. The court shall determine who the "prevailing party" is, whether or not the dispute or controversy proceeds to final judgment.

Because of the damage caused to refinery equipment, Big West Oil Company will not accept crude oil containing either chlorinated hydrocarbons, such as, but not limited to: carbon tetrachloride, declorethane, trichloroethylene, tetrachlorethylene, and 1,1,1, trichloroethane or oxygenated hydrocarbons such as but not limited to: isopropyl alcohol, acetone, and glycol's. Any seller who delivers crude oil to Big West Oil Company containing such contaminants will be responsible for fees or additional charges resulting from Big West Oil Company's handling or disposal of the said unacceptable material.

Accounting: Katie Wicker  
(801) 296-7832

Big West Oil, LLC appreciates the opportunity to do business with ARM Energy Management. Please advise Buyer immediately if you are not in agreement with any of the above provisions by email or phone to Chace Larsen at (801) 296-7776 (chace.larsen@bigwestoil.com). If Buyer does not receive a response within three business days, the terms and conditions set forth herein shall be considered binding upon both Buyer and Seller.

Attachment B

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DOMESTIC CRUDE OIL AGREEMENTS

(JANUARY 1, 1993 CONOCOPHILLIPS GENERAL PROVISIONS FOR  
DOMESTIC CRUDE OIL AGREEMENTS)

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**B. Warranty:** The Seller warrants good title to all crude oil delivered hereunder and warrants that such crude oil shall be free from all royalties, liens, encumbrances and all applicable foreign, federal, state and local taxes.

Seller further warrants that the crude oil delivered shall not be contaminated by chemicals foreign to virgin crude oil including, but not limited to chlorinated and/or oxygenated hydrocarbons and lead. Buyer shall have the right, without prejudice to any other remedy available to Buyer, to reject and return to Seller any quantities of crude oil which are found to be so contaminated, even after delivery to Buyer.

**C. Rules and Regulations:** The terms, provisions and activities undertaken pursuant to this Agreement shall be subject to all applicable laws, orders and regulations of all governmental authorities. If at any time a provision hereof violates any such applicable laws, orders or regulations, such provision shall be voided and the remainder of the Agreement shall continue in full force and effect unless terminated by either party upon giving written notice to the other party hereto. If applicable, the parties hereto agree to comply with all provisions (as amended) of the Equal Opportunity Clause prescribed in 41 C.F.R. 60-1.4; the Affirmative Action Clause for disabled veterans and veterans of the Vietnam Era prescribed in 41 C.F.R. 60-250.4; the Affirmative Action Clause for Handicapped Workers prescribed in 41 C.F.R. 60-741.4; 48 C.F.R. Chapter 1 Subpart 19.7 regarding Small Business and Small Disadvantaged Business Concerns; 48 C.F.R. Chapter 1 Subpart 20.3 regarding Utilization of Labor Surplus Area Concerns; Executive Order 12138 and regulations thereunder regarding subcontracts to women-owned business concerns; Affirmative Action Compliance Program (41 C.F.R. 60-1.40); annually file SF-100 Employer Information Report (41 C.F.R. 60-1.7); 41 C.F.R. 60-1.8 prohibiting segregated facilities; and the Fair Labor Standards Act of 1938 as amended, all of which are incorporated in this Agreement by reference.

**D. Hazard Communication:** Seller shall provide its Material Safety Data Sheet ("MSDS") to Buyer. Buyer acknowledges the hazards and risks in handling and using crude oil. Buyer shall read the MSDS and advise its employees, its affiliates, and third parties, who may purchase or come into contact with such crude oil, about the hazards of crude oil, as well as the precautionary procedures for handling said crude oil, which are set forth in such MSDS and any supplementary MSDS or written warning(s) which Seller may provide to Buyer from time to time.

**E. Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent such failure is occasioned by war, riots, insurrections, fire, explosions, sabotage, strikes, and other labor or industrial disturbances, acts of God or the elements, governmental laws, regulations, or requests, acts in furtherance of the International Energy Program, disruption or breakdown of production or transportation facilities, delays of pipeline carrier in receiving and delivering crude oil tendered, or by any other cause, whether similar or not, reasonably beyond the control of such party. Any such failures to perform shall be remedied with all reasonable dispatch, but neither party shall be required to supply substitute quantities from other sources of supply. Failure to perform due to events of Force Majeure shall not extend the terms of this Agreement.



Notwithstanding the above, and in the event that the Agreement is an associated purchase/sale, or exchange of crude oil, the parties shall have the rights and obligations described below in the circumstances described below:

(1) If, because of Force Majeure, the party declaring Force Majeure (the "Declaring Party") is unable to deliver part or all of the quantity of crude oil which the Declaring Party is obligated to deliver under the Agreement or associated contract, the other party (the "Exchange Partner") shall have the right but not the obligation to reduce its deliveries of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to deliver.

(2) If, because of Force Majeure, the Declaring Party is unable to take delivery of part or all of the quantity of crude oil to be delivered by the Exchange Partner under the Agreement or associated contract, the Exchange Partner shall have the right but not the obligation to reduce its receipts of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to take delivery of.

**F. Payment:** Unless otherwise specified in the Special Provisions of this Agreement, Buyer agrees to make payment against Seller's invoice for the crude oil purchased hereunder to a bank designated by Seller in U.S. dollars by telegraphic transfer in immediately available funds. Unless otherwise specified in the Special Provisions of this Agreement, payment will be due on or before the 20th of the month following the month of delivery. If payment due date is on a Saturday or New York bank holiday other than Monday, payment shall be due on the preceding New York banking day. If payment due date is on a Sunday or a Monday New York bank holiday, payment shall be due on the succeeding New York banking day.

Payment shall be deemed to be made on the date good funds are credited to Seller's account at Seller's designated bank.

In the event that Buyer fails to make any payment when due, Seller shall have the right to charge interest on the amount of the overdue payment at a per annum rate which shall be two percentage points higher than the published prime lending rate of Morgan Guaranty Trust Company of New York on the date payment was due, but not to exceed the maximum rate permitted by law.

**G. Financial Responsibility:** Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe it necessary to assure payment, Seller may at any time require, by written notice to Buyer, advance cash payment or satisfactory security in the form of a Letter or Letters of Credit at Buyer's expense in a form and from a bank acceptable to Seller to cover any or all deliveries of crude oil. If Buyer does not provide the Letter of Credit on or before the date specified in Seller's notice under this section, Seller or Buyer may terminate this Agreement forthwith. However, if a Letter of Credit is required under the Special Provisions of this Agreement and Buyer does not provide same, then Seller only may terminate this Agreement forthwith. In no event shall Seller be obligated to schedule or complete delivery of the crude oil until said Letter of Credit is found acceptable to Seller. Each party may offset any payments or deliveries due to the other party under this or any other agreement between the parties.

If a party to this Agreement (the "Defaulting Party") should (1) become the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee, or similar official, (2) become generally unable to pay its debts as they become due, or (3) make a general assignment for the benefit of creditors, the other party to this Agreement may withhold shipments without notice.

#### **H. Liquidation:**

(1) **Right to Liquidate.** At any time after the occurrence of one or more of the events described in the third paragraph of Section G, Financial Responsibility, the other party to the Agreement (the "Liquidating Party") shall have the right, at its sole discretion, to liquidate this Agreement by terminating this Agreement. Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the "Settlement Amount" or "Settlement Amounts") determined as provided in Paragraph (3) of this section.

(2) **Multiple Deliveries.** If this Agreement provides for multiple deliveries of one or more types of crude oil in the same or different delivery months, or for the purchase or exchange of crude oil by the parties, all deliveries under this Agreement to the same party at the same delivery location during a particular delivery month shall be considered a single commodity transaction ("Commodity Transaction") for the purpose of determining the Settlement Amount(s). If the Liquidating Party elects to liquidate this Agreement, the Liquidating Party must terminate all Commodity Transactions under this Agreement.

(3) **Settlement Amount.** With respect to each terminated Commodity Transaction, the Settlement Amount shall be equal to the contract quantity of crude oil, multiplied by the difference between the contract price per barrel specified in this Agreement (the "Contract Price") and the market price per barrel of crude oil on the date the Liquidating Party terminates this Agreement (the "Market Price"). If the Market Price exceeds the Contract Price in a Commodity Transaction, the selling party shall pay the Settlement Amount to the buying

party. If the Market Price is less than the Contract Price in a Commodity Transaction, the buying party shall pay the Settlement Amount to the selling party. If the Market Price is equal to the Contract Price in a Commodity Transaction, no Settlement Amount shall be due.

(4) **Termination Date.** For the purpose of determining the Settlement Amount, the date on which the Liquidating Party terminates this Agreement shall be deemed to be (a) the date on which the Liquidating Party sends written notice of termination to the Defaulting Party, if such notice of termination is sent by telex or facsimile transaction; or (b) the date on which the Defaulting Party receives written notice of termination from the Liquidating Party, if such notice of termination is given by United States mail or a private mail delivery service.

(5) **Market Price.** Unless otherwise provided in this Agreement, the Market Price of crude oil sold or exchanged under this Agreement shall be the price for crude oil for the delivery month specified in this Agreement and at the delivery location that corresponds to the delivery location specified in this Agreement, as reported in Platt's Oilgram Price Report ("Platt's") for the date on which the Liquidating Party terminates this Agreement. If Platt's reports a range of prices for crude oil on that date, the Market Price shall be the arithmetic average of the high and low prices reported by Platt's. If Platt's does not report prices for the crude oil being sold under this Agreement, the Liquidating Party shall determine the Market Price of such crude oil in a commercially reasonable manner, unless otherwise provided in this Agreement.

(6) **Payment of Settlement Amount.** Any Settlement Amount due upon termination of this Agreement shall be paid in immediately available funds within two business days after the Liquidating Party terminates this Agreement. However, if this Agreement provides for more than one Commodity Transaction, or if Settlement Amounts are due under other agreements terminated by the Liquidating Party, the Settlement Amounts due to each party for such Commodity Transactions and/or agreements shall be aggregated. The party owing the net amount after such aggregation shall pay such net amount to the other party in immediately available funds within two business days after the date on which the Liquidating Party terminates this Agreement.

(7) **Miscellaneous.** This section shall not limit the rights and remedies available to the Liquidating Party by law or under other provisions of this Agreement. The parties hereby acknowledge that this Agreement constitutes a forward contract for purposes of Section 556 of the U.S. Bankruptcy Code.

**I. Equal Daily Deliveries:** For pricing purposes only, unless otherwise specified in the Special Provisions, all crude oil delivered hereunder during any calendar month shall be considered to have been delivered in equal daily quantities during such month.

**J. Exchange Balancing:** If volumes are exchanged, each party shall be responsible for maintaining the exchange in balance on a month-to-month basis, as near as pipeline or other transportation conditions will permit. In all events upon termination of this Agreement and after all monetary obligations under this Agreement have been satisfied, any volume imbalance existing at the conclusion of this Agreement of less than 1,000 barrels will be declared in balance. Any volume imbalance of 1,000 barrels or more, limited to the total contract volume, will be settled by the underdelivering party making delivery of the total volume imbalance in accordance with the delivery provisions of this Agreement applicable to the underdelivering party, unless mutually agreed to the contrary. The request to schedule all volume imbalances must be confirmed in writing by one party or both parties. Volume imbalances confirmed by the 20th of the month shall be delivered during the calendar month after the volume imbalance is confirmed. Volume imbalances confirmed after the 20th of the month shall be delivered during the second calendar month after the volume imbalance is confirmed.

**K. Delivery, Title, and Risk of Loss:** Delivery, title, and risk of loss of the crude oil delivered hereunder shall pass from Seller to Buyer as follows: For lease delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the Seller's lease/unit storage tanks or processing facilities to the Buyer's carrier. Title to and risk of loss of the crude oil shall pass from Seller to Buyer at the point of delivery. For delivery locations other than lease/unit delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the delivery facility designated by the Seller to the Buyer's carrier. If delivery is by in-line transfer, delivery of the crude oil to the Buyer shall be effected at the particular pipeline facility designated in this Agreement. Title to and risk of loss of the crude oil shall pass from the Seller to the Buyer upon delivery.

**L. Term:** Unless otherwise specified in the Special Provisions, delivery months begin at 7:00 a.m. on the first day of the calendar month and end at 7:00 a.m. on the first day of the following calendar month.

**M. Governing Law:** This Agreement and any disputes arising hereunder shall be governed by the laws of the State of Texas.

N. **Necessary Documents:** Upon request, each party agrees to furnish all substantiating documents incident to the transaction, including a Delivery Ticket for each volume delivered and an invoice for any month in which the sums are due.

O. **Waiver:** No waiver by either party regarding the performance of the other party under any of the provisions of this Agreement shall be construed as a waiver of any subsequent performance under the same or any other provisions.

P. **Assignment:** Neither party shall assign this Agreement or any rights hereunder without the written consent of the other party unless such assignment is made to a person controlling, controlled by or under common control of assignor, in which event assignor shall remain responsible for nonperformance.

Q. **Entirety of Agreement:** The Special Provisions and these General Provisions contain the entire Agreement of the parties; there are no other promises, representations or warranties. Any modification of this Agreement shall be by written instrument. Any conflict between the Special Provisions and these General Provisions shall be resolved in favor of the Special Provisions. The section headings are for convenience only and shall not limit or change the subject matter of this Agreement.

R. **Definitions:** When used in this Agreement, the terms listed below have the following meanings:

"API" means the American Petroleum Institute.

"ASME" means the American Society of Mechanical Engineers.

"ASTM" means the American Society for Testing Materials.

"Barrel" means 42 U.S. gallons of 231 cubic inches per gallon corrected to 60 degrees Fahrenheit.

"Carrier" means a pipeline, barge, truck, or other suitable transporter of crude oil.

"Crude Oil" means crude oil or condensate, as appropriate.

"Day," "month," and "year" mean, respectively, calendar day, calendar month, and calendar year, unless otherwise specified.

"Delivery Ticket" means a shipping/loading document or documents stating the type and quality of crude oil delivered, the volume delivered and method of measurement, the corrected specific gravity, temperature, and S&W content.

"Invoice" means a statement setting forth at least the following information: The date(s) of delivery under the transaction; the location(s) of delivery; the volume(s); price(s); the specific gravity and gravity adjustments to the price(s) (where applicable); and the term(s) of payment.

"S&W" means sediment and water.



333 W. Center St • North Salt Lake City Utah 84054 • 801.296.7700 • www.bigwestoil.com

Date: September 12, 2018  
To: High Mesa Holdings, LP – Michael A. Phillips  
From: Big West Oil, LLC – Chace Larsen  
RE: Purchase of Idaho Condensate  
Big West Oil Contract # P1170815 – Amendment #4

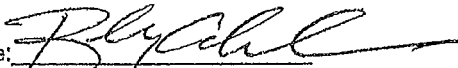
This Agreement is made between Big West Oil, LLC (Buyer) and High Mesa Holdings, LP (Seller), whereby Seller agrees to sell and deliver and Buyer agrees to purchase and receive condensate under the terms and conditions set forth on attachment A, attached hereto and which are hereby made a part of this Agreement and is replacing Big West Oil Contract # P1170815 – Amendment #3.

Please execute and return one copy of this Agreement if it meets with your approval.


Buyer: Big West Oil, LLC

Seller: High Mesa Holdings, LP

Signature: \_\_\_\_\_

  
Rocky Edelman

Signature: \_\_\_\_\_

  
Michael A. McCabe

Title: President of Commercial Operations

Title: Chief Financial Officer

Date: September 12, 2018

Date: September 14, 2018

*MAP*

## Attachment A

- Term:** April 2018 through March 2019 and continuing on a 60 day evergreen contract until the first day of the month following 60 days advance written notice of termination.
- Written notice of termination from Seller to be sent to: Chace Larsen, Sweet Crude & NGLs Manager at [chace.larsen@bigwestoil.com](mailto:chace.larsen@bigwestoil.com)
- Written notice of termination from Buyer to be sent to: Michael A. Phillips at [mphillips@altamesa.net](mailto:mphillips@altamesa.net)
- Big West Oil shall have the right to cease this contract immediately if the condensate delivered is deemed by Big West Oil to be inappropriate for its refinery, such determination to be made by Big West Oil, in its sole and absolute discretion.
- Quantity:** Approx. 225 bpd. Big West Oil will provide the railcars to keep produced condensate moving up to 275 bpd. Any additional volume may be added to the contract if mutually agreed upon by Buyer and Seller.
- Price:** All volumes purchased will be priced at the NYMEX Light Sweet Crude Oil average for the prompt month during the calendar month of delivery (trade days only) minus \$11.50/bbl.
- All applicable taxes will be applied
- Quality:** Alta Mesa Stabilizer Plant Condensate. The condensate is expected to be between 65-74 API, <0.1% Sulfur, and <0.5% BS&W with no contaminants (i.e. arsenic, metals, methanol, etc. All contaminants are to be defined by Big West Oil in its sole and absolute discretion).
- Title:** Title and risk of loss shall pass from Seller to Buyer when this material is delivered into Buyer's designated railcars at Ontario, OR transloading facility.
- Payment:** Payment due on the twentieth (20th) of the month following month of delivery. If the 20th falls on a Friday, holiday, or Saturday, the payment will be made on the last preceding business day. If payment date falls on a Sunday or Monday holiday, payment will be made on the following business day.
- Payment will be made via wire transfer for 100% of the proceeds including all taxes.
- Credit:** Open credit
- Assignment:** The Contract shall extend to and be binding upon the successors and assigns of the Parties, but this Contract shall not be assigned or transferred by Buyer without the prior written consent Seller which shall not be unreasonably withheld.
- Liability:** In no event shall either party be liable for loss of profits or indirect, special, exemplary or punitive, or consequential damages.
- Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent that such failure is the result of an industry standard force majeure event that is beyond the control of such party.
- GTC's:** The terms stated in the ConocoPhillips General Provisions for Domestic Crude Oil Agreements effective January 1, 1993 ("GP"), attached hereto as Attachment B and incorporated herein by reference, will be used to the extent that they are not in conflict with any of the terms in this Exhibit A, provided, however:

(1) The parties do not agree to comply with the specific laws, orders or regulations identified in Paragraph C of the GP unless such party is otherwise subject to such laws, orders or regulations.

(2) In the first sentence of Paragraph E the phrase "acts in furtherance of the International Energy Program," shall be deleted. On the third line of the first sentence of Paragraph E, the following words shall be inserted between the word "by" and the word "war": "unplanned maintenance, operational disruption or breakdown, operational upsets resulting in reductions in crude charges, off-specification feed stock or products, catalyst problems or failures,".

(3) Paragraph G shall be replaced in its entirety with the following: "Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe that Buyer shall be unable to perform its obligations in connection with the Agreement, Seller may notify Buyer in writing of Seller's insecurity in which case Buyer shall have the option to either (i) pay cash in advance of taking delivery of any Crude Oil hereunder or (ii) post security reasonably satisfactory to Seller. In the event that Buyer fails to make any requested advance payment or provide sufficient security, Seller shall have the right to immediately terminate this Agreement, but Buyer shall have no obligation to pay Seller the Settlement Amount in Paragraph H (3).

(4) Paragraph H (1) shall be amended to read as follows, "H. Termination: (1) If a party to this Agreement (a) becomes the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee or similar official, (b) becomes generally unable to pay its debts as they become due or (c) makes a general assignment for the benefit of creditors, then the other party to this Agreement (the "Terminating Party") may terminate this Agreement by giving written notice of termination. Such a termination shall be deemed to be effective immediately prior to any of the events described in clauses (a), (b) or (c) of this Section H (1). All references to "Liquidating Party" in this Paragraph H shall be replaced with "Terminating Party". Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the 'Settlement Amount' or 'Settlement Amounts') determined as provided in Paragraph (3) of this section." Paragraph H (3) shall be amended by adding to the end of the first sentence thereof the following: "discounted to present value at the time of payment using a discount rate equal to the interest rate determined under Paragraph F."

(5) The governing law set forth in Paragraph M of the GP shall be Utah law.

In the event of any claim, dispute or controversy arising out of or relating to this Agreement, including an action for declaratory relief, the prevailing party in such action or proceeding shall be entitled to recover its court costs and reasonable out-of-pocket expenses not limited to taxable costs, including but not limited to phone calls, photocopies, expert witness, travel, etc., and reasonable attorneys' fees to be fixed by the court. Such recovery shall include court costs, out-of-pocket expenses and attorneys' fees on appeal, if any. The court shall determine who the "prevailing party" is, whether or not the dispute or controversy proceeds to final judgment.

Because of the damage caused to refinery equipment, Big West Oil Company will not accept crude oil containing either chlorinated hydrocarbons, such as, but not limited to: carbon tetrachloride, declorethane, trichloroethylene, tetrachloroethylene, and 1,1,1, trichloroethane or oxygenated hydrocarbons such as but not limited to: isopropyl alcohol, acetone, and glycol's. Any seller who delivers crude oil to Big West Oil Company containing such contaminants will be responsible for fees or additional charges resulting from Big West Oil Company's handling or disposal of the said unacceptable material.

Accounting: Katie Wloker  
(801) 296-7832

Big West Oil, LLC appreciates the opportunity to do business with High Mesa Holdings, LP. Please advise Buyer immediately if you are not in agreement with any of the above provisions by email or phone to Chace Larsen at (801) 296-7776 (chace.larsen@bigwestoil.com). If Buyer does not receive a response within three business days, the terms and conditions set forth herein shall be considered binding upon both Buyer and Seller.



Attachment B

GENERAL PROVISIONS  
DOMESTIC CRUDE OIL AGREEMENTS

(JANUARY 1, 1993 CONOCOPHILLIPS GENERAL PROVISIONS FOR  
DOMESTIC CRUDE OIL AGREEMENTS)

**A. Measurement and Tests:** All measurements hereunder shall be made from static tank gauges on 100 percent tank table basis or by positive displacement meters. All measurements and tests shall be made in accordance with the latest ASTM or ASME-API (Petroleum PD Meter Code) published methods then in effect, whichever apply. Volume and gravity shall be adjusted to 60 degrees Fahrenheit by the use of Table 6A and 5A of the Petroleum Measurement Tables ASTM Designation D1250 in their latest revision. The crude oil delivered hereunder shall be marketable and acceptable in the applicable common or segregated stream of the carriers involved but not to exceed 1% S&W. Full deduction for all free water and S&W content shall be made according to the API/ASTM Standard Method then in effect. Either party shall have the right to have a representative witness all gauges, tests and measurements. In the absence of the other party's representative, such gauges, tests and measurements shall be deemed to be correct.

**B. Warranty:** The Seller warrants good title to all crude oil delivered hereunder and warrants that such crude oil shall be free from all royalties, liens, encumbrances and all applicable foreign, federal, state and local taxes.

Seller further warrants that the crude oil delivered shall not be contaminated by chemicals foreign to virgin crude oil including, but not limited to chlorinated and/or oxygenated hydrocarbons and lead. Buyer shall have the right, without prejudice to any other remedy available to Buyer, to reject and return to Seller any quantities of crude oil which are found to be so contaminated, even after delivery to Buyer.

**C. Rules and Regulations:** The terms, provisions and activities undertaken pursuant to this Agreement shall be subject to all applicable laws, orders and regulations of all governmental authorities. If at any time a provision hereof violates any such applicable laws, orders or regulations, such provision shall be voided and the remainder of the Agreement shall continue in full force and effect unless terminated by either party upon giving written notice to the other party hereto. If applicable, the parties hereto agree to comply with all provisions (as amended) of the Equal Opportunity Clause prescribed in 41 C.F.R. 60-1.4; the Affirmative Action Clause for disabled veterans and veterans of the Vietnam Era prescribed in 41 C.F.R. 60-250.4; the Affirmative Action Clause for Handicapped Workers prescribed in 41 C.F.R. 60-741.4; 48 C.F.R. Chapter 1 Subpart 19.7 regarding Small Business and Small Disadvantaged Business Concerns; 48 C.F.R. Chapter 1 Subpart 20.3 regarding Utilization of Labor Surplus Area Concerns; Executive Order 12138 and regulations thereunder regarding subcontracts to women-owned business concerns; Affirmative Action Compliance Program (41 C.F.R. 60-1.40); annually file SF-100 Employer Information Report (41 C.F.R. 60-1.7); 41 C.F.R. 60-1.8 prohibiting segregated facilities; and the Fair Labor Standards Act of 1938 as amended, all of which are incorporated in this Agreement by reference.

**D. Hazard Communication:** Seller shall provide its Material Safety Data Sheet ("MSDS") to Buyer. Buyer acknowledges the hazards and risks in handling and using crude oil. Buyer shall read the MSDS and advise its employees, its affiliates, and third parties, who may purchase or come into contact with such crude oil, about the hazards of crude oil, as well as the precautionary procedures for handling said crude oil, which are set forth in such MSDS and any supplementary MSDS or written warning(s) which Seller may provide to Buyer from time to time.

**E. Force Majeure:** Except for payment due hereunder, either party hereto shall be relieved from liability for failure to perform hereunder for the duration and to the extent such failure is occasioned by war, riots, insurrections, fire, explosions, sabotage, strikes, and other labor or industrial disturbances, acts of God or the elements, governmental laws, regulations, or requests, acts in furtherance of the International Energy Program, disruption or breakdown of production or transportation facilities, delays of pipeline carrier in receiving and delivering crude oil tendered, or by any other cause, whether similar or not, reasonably beyond the control of such party. Any such failures to perform shall be remedied with all reasonable dispatch, but neither party shall be required to supply substitute quantities from other sources of supply. Failure to perform due to events of Force Majeure shall not extend the terms of this Agreement.

Notwithstanding the above, and in the event that the Agreement is an associated purchase/sale, or exchange of crude oil, the parties shall have the rights and obligations described below in the circumstances described below:

(1) If, because of Force Majeure, the party declaring Force Majeure (the "Declaring Party") is unable to deliver part or all of the quantity of crude oil which the Declaring Party is obligated to deliver under the Agreement or associated contract, the other party (the "Exchange Partner") shall have the right but not the obligation to reduce its deliveries of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to deliver.

(2) If, because of Force Majeure, the Declaring Party is unable to take delivery of part or all of the quantity of crude oil to be delivered by the Exchange Partner under the Agreement or associated contract, the Exchange Partner shall have the right but not the obligation to reduce its receipts of crude oil under the same Agreement or associated contract by an amount not to exceed the number of barrels of crude oil that the Declaring Party fails to take delivery of.

**F. Payment:** Unless otherwise specified in the Special Provisions of this Agreement, Buyer agrees to make payment against Seller's invoice for the crude oil purchased hereunder to a bank designated by Seller in U.S. dollars by telegraphic transfer in immediately available funds. Unless otherwise specified in the Special Provisions of this Agreement, payment will be due on or before the 20th of the month following the month of delivery. If payment due date is on a Saturday or New York bank holiday other than Monday, payment shall be due on the preceding New York banking day. If payment due date is on a Sunday or a Monday New York bank holiday, payment shall be due on the succeeding New York banking day.

Payment shall be deemed to be made on the date good funds are credited to Seller's account at Seller's designated bank.

In the event that Buyer fails to make any payment when due, Seller shall have the right to charge interest on the amount of the overdue payment at a per annum rate which shall be two percentage points higher than the published prime lending rate of Morgan Guaranty Trust Company of New York on the date payment was due, but not to exceed the maximum rate permitted by law.

**G. Financial Responsibility:** Notwithstanding anything to the contrary in this Agreement, should Seller reasonably believe it necessary to assure payment, Seller may, at any time require, by written notice to Buyer, advance cash payment or satisfactory security in the form of a Letter or Letters of Credit at Buyer's expense in a form and from a bank acceptable to Seller to cover any or all deliveries of crude oil. If Buyer does not provide the Letter of Credit on or before the date specified in Seller's notice under this section, Seller or Buyer may terminate this Agreement forthwith. However, if a Letter of Credit is required under the Special Provisions of this Agreement and Buyer does not provide same, then Seller only may terminate this Agreement forthwith. In no event shall Seller be obligated to schedule or complete delivery of the crude oil until said Letter of Credit is found acceptable to Seller. Each party may offset any payments or deliveries due to the other party under this or any other agreement between the parties.

If a party to this Agreement (the "Defaulting Party") should (1) become the subject of bankruptcy or other insolvency proceedings, or proceedings for the appointment of a receiver, trustee, or similar official, (2) become generally unable to pay its debts as they become due, or (3) make a general assignment for the benefit of creditors, the other party to this Agreement may withhold shipments without notice.

**H. Liquidation:**

(1) **Right to Liquidate.** At any time after the occurrence of one or more of the events described in the third paragraph of Section G, Financial Responsibility, the other party to the Agreement (the "Liquidating Party") shall have the right, at its sole discretion, to liquidate this Agreement by terminating this Agreement. Upon termination, the parties shall have no further rights or obligations with respect to this Agreement, except for the payment of the amount(s) (the "Settlement Amount" or "Settlement Amounts") determined as provided in Paragraph (3) of this section.

(2) **Multiple Deliveries.** If this Agreement provides for multiple deliveries of one or more types of crude oil in the same or different delivery months, or for the purchase or exchange of crude oil by the parties, all deliveries under this Agreement to the same party at the same delivery location during a particular delivery month shall be considered a single commodity transaction ("Commodity Transaction") for the purpose of determining the Settlement Amount(s). If the Liquidating Party elects to liquidate this Agreement, the Liquidating Party must terminate all Commodity Transactions under this Agreement.

(3) **Settlement Amount.** With respect to each terminated Commodity Transaction, the Settlement Amount shall be equal to the contract quantity of crude oil, multiplied by the difference between the contract price per barrel specified in this Agreement (the "Contract Price") and the market price per barrel of crude oil on the date the Liquidating Party terminates this Agreement (the "Market Price"). If the Market Price exceeds the Contract Price in a Commodity Transaction, the selling party shall pay the Settlement Amount to the buying

party. If the Market Price is less than the Contract Price in a Commodity Transaction, the buying party shall pay the Settlement Amount to the selling party. If the Market Price is equal to the Contract Price in a Commodity Transaction, no Settlement Amount shall be due.

(4) **Termination Date.** For the purpose of determining the Settlement Amount, the date on which the Liquidating Party terminates this Agreement shall be deemed to be (a) the date on which the Liquidating Party sends written notice of termination to the Defaulting Party, if such notice of termination is sent by telex or facsimile transaction; or (b) the date on which the Defaulting Party receives written notice of termination from the Liquidating Party, if such notice of termination is given by United States mail or a private mail delivery service.

(5) **Market Price.** Unless otherwise provided in this Agreement, the Market Price of crude oil sold or exchanged under this Agreement shall be the price for crude oil for the delivery month specified in this Agreement and at the delivery location that corresponds to the delivery location specified in this Agreement, as reported in Platt's Oilgram Price Report ("Platt's") for the date on which the Liquidating Party terminates this Agreement. If Platt's reports a range of prices for crude oil on that date, the Market Price shall be the arithmetic average of the high and low prices reported by Platt's. If Platt's does not report prices for the crude oil being sold under this Agreement, the Liquidating Party shall determine the Market Price of such crude oil in a commercially reasonable manner, unless otherwise provided in this Agreement.

(6) **Payment of Settlement Amount.** Any Settlement Amount due upon termination of this Agreement shall be paid in immediately available funds within two business days after the Liquidating Party terminates this Agreement. However, if this Agreement provides for more than one Commodity Transaction, or if Settlement Amounts are due under other agreements terminated by the Liquidating Party, the Settlement Amounts due to each party for such Commodity Transactions and/or agreements shall be aggregated. The party owing the net amount after such aggregation shall pay such net amount to the other party in immediately available funds within two business days after the date on which the Liquidating Party terminates this Agreement.

(7) **Miscellaneous.** This section shall not limit the rights and remedies available to the Liquidating Party by law or under other provisions of this Agreement. The parties hereby acknowledge that this Agreement constitutes a forward contract for purposes of Section 556 of the U.S. Bankruptcy Code.

**I. Equal Daily Deliveries:** For pricing purposes only, unless otherwise specified in the Special Provisions, all crude oil delivered hereunder during any calendar month shall be considered to have been delivered in equal daily quantities during such month.

**J. Exchange Balancing:** If volumes are exchanged, each party shall be responsible for maintaining the exchange in balance on a month-to-month basis, as near as pipeline or other transportation conditions will permit. In all events upon termination of this Agreement and after all monetary obligations under this Agreement have been satisfied, any volume imbalance existing at the conclusion of this Agreement of less than 1,000 barrels will be declared in balance. Any volume imbalance of 1,000 barrels or more, limited to the total contract volume, will be settled by the underdelivering party making delivery of the total volume imbalance in accordance with the delivery provisions of this Agreement applicable to the underdelivering party, unless mutually agreed to the contrary. The request to schedule all volume imbalances must be confirmed in writing by one party or both parties. Volume imbalances confirmed by the 20th of the month shall be delivered during the calendar month after the volume imbalance is confirmed. Volume imbalances confirmed after the 20th of the month shall be delivered during the second calendar month after the volume imbalance is confirmed.

**K. Delivery, Title, and Risk of Loss:** Delivery, title, and risk of loss of the crude oil delivered hereunder shall pass from Seller to Buyer as follows: For lease delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the Seller's lease/unit storage tanks or processing facilities to the Buyer's carrier. Title to and risk of loss of the crude oil shall pass from Seller to Buyer at the point of delivery. For delivery locations other than lease/unit delivery locations, delivery of the crude oil to the Buyer shall be effected as the crude oil passes the last permanent delivery flange and/or meter connecting the delivery facility designated by the Seller to the Buyer's carrier. If delivery is by in-line transfer, delivery of the crude oil to the Buyer shall be effected at the particular pipeline facility designated in this Agreement. Title to and risk of loss of the crude oil shall pass from the Seller to the Buyer upon delivery.

**L. Term:** Unless otherwise specified in the Special Provisions, delivery months begin at 7:00 a.m. on the first day of the calendar month and end at 7:00 a.m. on the first day of the following calendar month.

**M. Governing Law:** This Agreement and any disputes arising hereunder shall be governed by the laws of the State of Texas.

**N. Necessary Documents:** Upon request, each party agrees to furnish all substantiating documents incident to the transaction, including a Delivery Ticket for each volume delivered and an Invoice for any month in which the sums are due.

**O. Waiver:** No waiver by either party regarding the performance of the other party under any of the provisions of this Agreement shall be construed as a waiver of any subsequent performance under the same or any other provisions.

**P. Assignment:** Neither party shall assign this Agreement or any rights hereunder without the written consent of the other party unless such assignment is made to a person controlling, controlled by or under common control of assignor, in which event assignor shall remain responsible for nonperformance.

**Q. Entirety of Agreement:** The Special Provisions and these General Provisions contain the entire Agreement of the parties; there are no other promises, representations or warranties. Any modification of this Agreement shall be by written instrument. Any conflict between the Special Provisions and these General Provisions shall be resolved in favor of the Special Provisions. The section headings are for convenience only and shall not limit or change the subject matter of this Agreement.

**R. Definitions:** When used in this Agreement, the terms listed below have the following meanings:

"API" means the American Petroleum Institute.

"ASME" means the American Society of Mechanical Engineers.

"ASTM" means the American Society for Testing Materials.

"Barrel" means 42 U.S. gallons of 231 cubic inches per gallon corrected to 60 degrees Fahrenheit.

"Carrier" means a pipeline, barge, truck, or other suitable transporter of crude oil.

"Crude Oil" means crude oil or condensate, as appropriate.

"Day," "month," and "year" mean, respectively, calendar day, calendar month, and calendar year, unless otherwise specified.

"Delivery Ticket" means a shipping/loading document or documents stating the type and quality of crude oil delivered, the volume delivered and method of measurement, the corrected specific gravity, temperature, and S&W content.

"Invoice" means a statement setting forth at least the following information: The date(s) of delivery under the transaction; the location(s) of delivery; the volume(s); price(s); the specific gravity and gravity adjustments to the price(s) (where applicable); and the term(s) of payment.

"S&W" means sediment and water.

Attachment H1  
(50 Pages)

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**MARKETING SERVICES AGREEMENT**

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By and Among:

**ARM ENERGY MANAGEMENT, LLC**

and

**ALTA MESA SERVICES, LP**

January 8, 2015

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\* \* \* \* \*

## MARKETING SERVICES AGREEMENT

THIS MARKETING SERVICES AGREEMENT (as the same may be amended, restated, or otherwise modified, this "Agreement") is made and entered into as of the 8<sup>th</sup> day of January, 2015 (the "Effective Date"), by and between ARM Energy Management LLC, a Delaware limited liability company ("AEM") and Alta Mesa Services, LP, a Texas limited partnership ("Operator"). Operator and AEM may be referred to individually as a "Party" and collectively as the "Parties".

### PRELIMINARY STATEMENT

WHEREAS, Operator is an oil and gas operator with rights to market certain Hydrocarbon production from various wells on the lands within the Dedicated Area;

WHEREAS, AEM is a marketer of Hydrocarbons;

WHEREAS, Operator desires to appoint AEM to act as its sole and exclusive representative for all purposes with regards to negotiating and entering into agreements for the ultimate sale of Dedicated Area Hydrocarbons to Third Parties and AEM desires to accept such appointment, subject to the terms and conditions provided herein; and

WHEREAS, Operator and AEM desire to define certain rights and obligations as between the Parties regarding certain sales of Dedicated Area Hydrocarbons to be sold by Operator to AEM whereby such Dedicated Area Hydrocarbons will be resold by AEM to Third Parties pursuant to one or more Corresponding Third Party Transactions.

### AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

#### ARTICLE 1 DEFINITIONS

1.1 Rules of Interpretation. All references herein to any agreement or other document of any description shall be deemed to refer to such agreement or document as it may be amended, supplemented, modified or replaced from time to time in accordance with its terms. All references herein to any Applicable Law shall be deemed to refer to such Applicable Law as it may be amended, supplemented or modified from time to time. References in the singular shall include references in the plural and vice versa, and words denoting natural persons shall include all Persons. References to a particular Article, Section, Subsection, Exhibit or Schedule shall, unless specified otherwise, be a reference to that Article, Section, Subsection, Exhibit or Schedule in or to this Agreement. The words "include" and "including" are to be construed to include the phrase "not limited to". The word "or" is not exclusive. Any reference in this Agreement to any Person includes its permitted successors and assigns or to any Person succeeding to its functions. All references to days shall refer to calendar days unless Business Days are specified. All dates and times specified in this Agreement are of the essence and shall

be strictly enforced. Except as otherwise specifically provided in this Agreement, all actions that occur after the close of business on a given Business Day shall be deemed for purposes of this Agreement to have occurred at 9:00 a.m. on the following Business Day. In the event that the last day for the exercise of any right or the discharge of any duty under this Agreement would otherwise be a day that is not a Business Day, the period for exercising the right or discharging such duty shall be extended until the close of business on the next succeeding Business Day.

1.2 Defined Terms. As used in this Agreement, the following capitalized terms have the meanings set forth below (certain Hydrocarbon-specific definitions are set forth on Schedule 2 hereto):

“AEM” has the meaning set forth in the preamble to this Agreement.

“AEM Event of Default” has the meaning set forth in Section 9.1 hereof.

“AEM Indemnified Party” means AEM’s Designated Representative(s), AEM and its Affiliates, and their respective managers, members, shareholders, partners, principals, officers, directors, employees, agents and representatives.

“AEM Marketing Agreement” means a marketing services agreement by and between Operator or an Affiliate of Operator and AEM pursuant to which Operator or its Affiliate agrees that AEM shall have the exclusive right for the term of such agreement to market and sell all Hydrocarbons produced and saved from the agreed upon acreage set forth in such agreement. This Agreement shall constitute an AEM Marketing Agreement.

“AEM Net Sales Price” means, with respect to an AEM Purchase Transaction of Dedicated Area Hydrocarbons, an amount equal to the difference between (i) the Unit sales price of the Dedicated Area Hydrocarbons at the Applicable Delivery Point for the Corresponding Third Party Transaction minus (ii) the applicable AEM Transportation Costs.

“AEM Purchase Transaction” means a transaction between Operator or an Affiliate of Operator and AEM whereby AEM purchases Hydrocarbons from Operator or its Affiliate (on behalf of the owners of such Hydrocarbons) pursuant to the terms of an AEM Marketing Agreement and for which AEM is entitled to a Marketing Fee.

“AEM Transportation Costs” means all applicable costs and expenses incurred and paid by AEM (calculated on a Unit basis), if any, arising out of the delivery of applicable Dedicated Area Hydrocarbons from (i) the Applicable Delivery Point of an AEM Purchase Transaction to (ii) the Applicable Delivery Point of a Corresponding Third Party Transaction, including costs of transportation, Transloading Fees (as determined in Schedule 3), costs incurred for quality adjustments, treating costs for Gas and taxes excluding any allocated costs (other than Transloading Fees) which are not evidenced by invoices from third parties unless approved in advance by the Producer which approval shall not be unreasonably withheld or delayed. Such costs and expenses shall only include costs that are direct and shall not include any allocated costs, overhead or general and administrative expenses.

“Affected Party” has the meaning set forth in Section 8.1 hereof.

"Affiliate" means, with respect to any Person, (i) any other Person directly or indirectly Controlling, Controlled by, or under common Control with such Person, and (ii) any other Person under the joint Control, directly or indirectly, of such Person. Notwithstanding the foregoing or anything else contained in this Agreement, for purposes of this Agreement, Operator shall not be deemed an "Affiliate" of AEM, and AEM shall not be deemed an "Affiliate" of Operator.

"Agent" has the meaning set forth in Section 2.6(a) hereof.

"Agreement" has the meaning set forth in the preamble hereof.

"Ancillary Agreement" means any agreement by and between the Parties (or their Affiliates) relating to the Dedicated Area Hydrocarbons.

"Applicable Delivery Point" means the delivery point for Hydrocarbons designated in the Confirmation for an AEM Purchase Transaction or the applicable confirmatory documentation in any Third Party Purchase Transaction or Corresponding Third Party Transaction.

"Applicable Law" means any federal, state or local laws (including common law and criminal law), codes, statutes, directives, ordinances, by-laws, regulations, rules, judgments, consent orders and agreements with Governmental Authorities, proclamations or delegated or subordinated legislation of any Governmental Authority or Regulatory Approvals that are applicable to this Agreement, the Parties hereto, the Services or the Transactions.

"Bankrupt" or "Bankruptcy" means, for any Person, such Person (i) becomes subject to an "order for relief" under the Bankruptcy Code, (ii) makes an assignment or any general arrangement (at any time after the Effective Date of this Agreement) for the benefit of creditors with respect to all or substantially all of its assets that will prevent its performance under this Agreement or deny the other Party the ability to exercise its rights pursuant to this Agreement (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

"Bankruptcy Code" means Title 11 of the United States Code.

"Barrel" has the meaning set forth in Section 7 of Schedule 2 hereof.

"Business Day" means any day other than a Saturday or a Sunday on which Federal Reserve member banks in Houston, Texas are open for business.

"Capital Costs" has the meaning set forth in Section 1 of Schedule 3 hereof.

"CERCLA" means the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

"Change of Control of AEM" means any of the following: (a) any event or circumstance, the result of which a Person Controls AEM that did not Control AEM immediately prior to such

event or circumstance, or (b) two of Gilbert Burciaga (or his successor if approved by Operator, which approval shall not be unreasonably withheld), Zachary Lee (or his successor if approved by Operator, which approval shall not be unreasonably withheld) and Vincent T. McConnell (or his successor if approved by Operator, which approval shall not be unreasonably withheld) cease to be managers of AEM.

“Control” (including derivations of the word) means, with respect to an entity, the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, whether through the ownership of voting securities, by contract or otherwise.

“Commercial Terms” shall mean, with respect to any Transaction, (i) Hydrocarbon specifications, (ii) the receipt and delivery points, (iii) Hydrocarbon quantity, (iv) delivery dates or periods, (v) price, and (vi) any other fees, charges or expenses to be paid or borne by a party to the Transaction.

“Components” means those Hydrocarbon and non-Hydrocarbon molecular constituents, each of which are definable by industry standards and procedures.

“Confidential Information” has the meaning set forth in Section 12.1 hereof.

“Confirmation” means a written document or electronic transmission (as contemplated in Section 5.3(b)) setting forth the particular details for an AEM Purchase Transaction under this Agreement, issued to confirm and memorialize the terms of such AEM Purchase Transaction as agreed to by the Parties.

“Contract Year” means the twelve- (12) month period beginning on June 1, 2014, or an anniversary thereof, and ending on the day immediately preceding the one-year anniversary of the respective start date for each period.

“Conventionally Separated Liquids” means any condensate from Gas removed by any conventional mechanical separator (excluding any device that uses the principle of low temperature extraction, compression, absorption or liquid recirculation for recovery).

“Corresponding Third Party Transaction” means a transaction or series of transactions between AEM and one or more Third Parties wherein AEM resells certain Dedicated Area Hydrocarbons purchased from Operator pursuant to an AEM Purchase Transaction or any part of an AEM Purchase Transaction.

“Damages” has the meaning set forth in Section 10.1 hereof.

“Defaulting Party” means Operator, in respect of Operator Events of Default, and AEM, in respect of AEM Events of Default.

“Dedicated Area” means that area or areas as described or depicted on Exhibit A hereto.

“Dedicated Area Hydrocarbons” means, all Hydrocarbons produced and saved from the Dedicated Area other than Producer Barrels for which Operator is operator with the rights to market such Hydrocarbons.

“Dedicated Area Leasehold” means all of Operator’s rights, titles, interests and estates in, to and under the oil and gas leases and/or oil, gas and mineral leases, leasehold interests, mineral interests, royalty interests, overriding royalty interests, reversionary rights and contractual rights comprising the Dedicated Area.

“Default Rate” means the lesser of (a) the per annum Prime Rate of interest as reported in the “Money Rates” column of The Wall Street Journal on the last Business Day of the preceding Month, as the same may change from time to time, plus 2%, or (b) the Highest Lawful Rate.

“Designated Representative” means (i) with respect to Operator, the Person designated by Operator from time to time to undertake the day-to-day administration and management hereunder on behalf of Operator pursuant to Section 3.2 or (ii) with respect to AEM, the Person designated by AEM from time to time to undertake the day-to-day administration and management hereunder on behalf of AEM pursuant to Section 3.2.

“Disclosing Party” has the meaning set forth in Section 12.1 hereof.

“Effective Date” has the meaning set forth in the preamble hereof.

“Environmental Laws” means all applicable and legally binding federal, state, local laws, statutes, laws (including common law), ordinances, codes, rules, regulations and guidelines (including consent decrees and administrative orders) relating to public health and safety and the preservation or protection of the environment, including those relating to the generation, use, storage, handling or Release of or exposure to Hazardous Materials.

“Environmental Liabilities” means all liabilities, obligations, responsibilities, obligations to conduct cleanups, and all environmental claims pending or threatened against Operator or its Affiliates or against any Person whose liability for any environmental claim Operator or its Affiliates may have retained or assumed either contractually or by operation of law, arising from (i) environmental, health or safety conditions, (ii) compliance with applicable Environmental Laws, (iii) the presence, Release or threatened Release of Hazardous Materials, whether or not owned, leased or operated by the Operator or its Affiliates, or (iv) circumstances forming the basis of any violation, or alleged violation, of any Environmental Law.

“Event of Default” means any Operator Event of Default or AEM Event of Default.

“Extension Period” has the meaning set forth in Section 2.2 hereof.

“Force Majeure” means, with respect to the Party claiming Force Majeure under this Agreement, any natural phenomena that such Party could not reasonably control, foresee or prevent or any human event or a combination of human events that such Party could not reasonably control or prevent, which phenomena or events materially impede a Party from performing its obligations under this Agreement. Force Majeure shall not include (i) lack of a market or unfavorable market conditions for Hydrocarbons or (ii) economic hardship. Subject to

the foregoing, such Force Majeure events shall include the following: (a) acts of a public enemy, war or threat of war (declared or undeclared) occurring in or involving the United States, revolution, riot, rebellion, insurrection, military or usurped power, state of siege, declaration of a state of emergency or martial law (or any of the events or circumstances that will or may result in the declaration of a state of emergency or martial law), acts or failures to act by Governmental Authorities, civil commotion, act of terrorism, vandalism or sabotage (in each case occurring in or involving the United States), embargo or blockade, declaration of public calamity (or any of the events or circumstances that will or may result in the declaration of public calamity); (b) politically motivated or otherwise widespread strikes, suspensions, interruptions, work slow-downs or other labor disruptions; (c) explosions, chemical or radioactive contamination or ionizing radiation; (d) air crashes, objects falling from aircraft, pressure waves caused by aircraft or aerial devices traveling at supersonic speed; or (e) epidemics, meteorites, fire, lightning, earthquake, cyclone, whirlwind, hurricane, tempest, storm, drought, flood, or other unusual or extreme adverse weather or environmental condition or action of the elements.

“Gas” has the meaning set forth in Section 7 of Schedule 2 hereof.

“Governmental Authority” means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency or instrumentality, or any judicial, regulatory, administrative or quasi-governmental body, having or asserting jurisdiction as to the matter in question.

“Hazardous Material” means (i) any “hazardous substance,” as defined by CERCLA; (ii) any “hazardous waste,” as defined by the Resource Conservation and Recovery Act; (iii) any petroleum, petroleum product or by-product; or (iv) any pollutant or contaminant or hazardous, dangerous or toxic chemical, material or substance (including any petroleum product) defined, listed or regulated under any other Environmental Laws.

“Highest Lawful Rate” means the maximum lawful interest rate, if any, that at any time or from time to time may be contracted for, charged or received that are presently in effect or, to the extent allowed by law, under such applicable laws that may hereafter be in effect and that allow a higher maximum non-usurious interest rate than applicable laws now allow.

“Hydrocarbons” means Oil, Gas and Natural Gas Liquids.

“Initial Term” has the meaning set forth in Section 2.2 hereof.

“Interest Rate” means the lesser of (i) the per annum Prime Rate of interest as reported in the “Money Rates” column of The Wall Street Journal on the last Business Day of the preceding Month, as the same may change from time to time plus two percent (2%) or (ii) the Highest Lawful Rate.

“Intermediate Sale Period” means, with respect to an Intermediate Sale Proposal, the three consecutive calendar months commencing with the calendar month of the Prompt Month applicable to such Intermediate Sale Proposal.

“Intermediate Sale Proposal” has the meaning set forth in Section 5.2(a).



“Lien” means any security interest, mortgage, hypothecation, assignment, encumbrance, or lien (statutory or other) of any kind or nature whatsoever.

“Marketing Fee” means, with respect to an AEM Purchase Transaction or a Third Party Purchase Transaction, an amount calculated on a per Unit basis as follows: (i) prior to Operator reaching its Marketing Fee Reduction Amount in any Contract Year, (a) with respect to an AEM Purchase Transaction occurring during such Contract Year, an amount equal to one percent (1%) of the AEM Net Sales Price in such AEM Purchase Transaction, and (b) with respect to a Third Party Purchase Transaction during such Contract Year, an amount equal to one percent (1%) of the Operator Net Sales Price in such Third Party Purchase Transaction; and (ii) after Operator has reached its Marketing Fee Reduction Amount in any such Contract Year, (a) with respect to an AEM Purchase Transaction during such Contract Year, an amount equal to five-tenths percent (0.5%) of the AEM Net Sales Price in such AEM Purchase Transaction, and (b) with respect to a Third Party Purchase Transaction during such Contract Year, an amount equal to five-tenths percent (0.5%) of the Operator Net Sales Price in such Third Party Purchase Transaction; provided, however, that the Marketing Fee for Transactions pursuant to this Agreement shall be no less than the applicable floor and no greater than the applicable cap (on a per Unit basis) set forth on Schedule 1 hereto.

“Marketing Fee Reduction Amount” means, during each Contract Year pursuant to AEM Purchase Transactions and Third Party Purchase Transactions (in each case, for which a Marketing Fee is paid to AEM), an aggregate amount of Hydrocarbons equal to the product of (i) 10,000 Barrels of Oil, multiplied by (ii) the number of days in such Contract Year; provided, the commitment amount may be satisfied by delivering Oil, Gas (where 10 MCFs of Gas equals 1 Barrel of Oil) or Natural Gas Liquids (where 2 Barrels of Natural Gas Liquids equals 1 Barrel of Oil). For purposes of determining when Operator has reached the Marketing Fee Reduction Amount, all Hydrocarbons delivered pursuant to an AEM Purchase Transaction or a Third Party Purchase Transaction during any Month shall be considered to have been delivered in equal daily quantities during such Month.

“MCF” has the meaning set forth in Section 7 of Schedule 2 hereof.

“Month” means a calendar month.

“Monthly Net Amount” has the meaning set forth in Section 6.2(a) hereof.

“Monthly Settlement Statement” has the meaning set forth in Section 6.2(a) hereof.

“Natural Gas Liquids” has the meaning set forth in Section 7 of Schedule 2 hereof.

“Non-Defaulting Party” means Operator, in respect of any AEM Event of Default, and AEM, in respect of any Operator Event of Default.

“NYMEX” means the New York Mercantile Exchange.

“Oil” has the meaning set forth in Section 7 of Schedule 2 hereof.

“Operator” has the meaning set forth in the preamble hereof.

“Operator Event of Default” has the meaning set forth in Section 9.2 hereof.

“Operator Indemnified Party” means Operator’s Designated Representative(s) and its Affiliates and their respective managers, members, shareholders, partners, principals, officers, directors, employees, agents and representatives.

“Operator Net Sales Price” means, with respect to an Third Party Purchase Transaction of Dedicated Area Hydrocarbons, the amount equal to the Unit sales price of the applicable Dedicated Area Hydrocarbons at the Applicable Delivery Point of such Third Party Purchase Transaction.

“Other Proposal” has the meaning set forth in Section 5.2(b) hereof.

“Outstanding Transaction” has the meaning set forth in Section 2.3(c) hereof.

“Party” has the meaning set forth in the preamble hereof.

“Parties” has the meaning set forth in the preamble hereof.

“Payee Party” has the meaning set forth in Section 6.2(a) hereof.

“Paying Party” has the meaning set forth in Section 6.2(a) hereof.

“Payment Obligations” has the meaning set forth in Section 6.2(a) hereof.

“Person” means and includes natural persons, corporations, limited partnerships, general partnerships, limited liability companies, limited liability partnerships, joint stock companies, joint ventures, associations, companies, trusts, banks, trust companies, land trusts, business trusts or other organizations, whether or not legal entities, and Governmental Authorities.

“Producer Barrels” means such quantities of Hydrocarbons produced from the Dedicated Area (i) that the producer (or the Operator on behalf of the producer) is permitted to reserve as fuel for drilling and lease operations on leases within the Dedicated Area (including Hydrocarbons used to transport, separate or process Hydrocarbons), and (ii) provided to lessors and other royalty and interest holders as payment in kind.

“Production Plans” has the meaning set forth in Section 3.1(a) hereof.

“Prompt Month” means, with respect to a Sale Proposal, the nearest month of delivery of the commodity identified in the Sale Proposal for which NYMEX futures prices are published during the trading month. For purposes of this definition, the term “trading month” means the period extending from the second business day before the 25th day of the second calendar month preceding the delivery month (or, if the 25th day of that month is a non-business day, the second business day before the last business day preceding the 25th day of that month) through the third business day before the 25th day of the calendar month preceding the delivery month (or, if the 25th day of that month is a non-business day, the third business day before the last business day preceding the 25th day of that month), unless the NYMEX publishes a different definition or different dates on its official web site, in which case the NYMEX definition will apply.

“Prompt Month Proposal” has the meaning set forth in Section 5.2(a).

“Prompt Sale Period” means, with respect to a Prompt Month Proposal, the calendar month of the Prompt Month applicable to such Prompt Month Proposal.

“Receiving Party” has the meaning set forth in Section 12.1 hereof.

“Regulatory Approval” means all permits, licenses, consents, approvals, certifications and similar items issued by any Governmental Authority and all filings, reports, notices or similar items submitted to any Governmental Authority or Third Party that are necessary for the performance of the Services and the entering into and performance of the Transactions.

“Regulatory Event” has the meaning set forth in Section 15.6 hereof.

“Release” means a “release” as such term is defined in CERCLA.

“Remaining Volumes” has the meaning set forth in Section 5(a) of Schedule 2 hereof.

“Remaining Volumes Costs” has the meaning set forth in Section 5(a) of Schedule 2 hereof.

“Sale Proposal” has the meaning set forth in Section 5.2(a) hereof.

“Services” has the meaning set forth in Section 4.1 hereof.

“Shortfall Damages” has the meaning set forth in Section 5(b) of Schedule 2 hereof.

“Standard Terms” has the meaning set forth in Section 1 of Schedule 2 hereof.

“Term” has the meaning set forth in Section 2.2 hereof.

“Terminal Operator” has the meaning set forth in Section 4(b) of Schedule 2 hereof.

“Termination Notice” has the meaning set forth in Section 9.3(a) hereof.

“Third Party” means any Person other than Operator, Operator’s Affiliates, AEM or AEM’s Affiliates.

“Third Party Purchase Transaction” means a transaction between Operator or an Affiliate of Operator and a Third Party whereby the Third Party purchases Hydrocarbons from Operator or its Affiliate and for which AEM is entitled to a Marketing Fee.

“Transaction” means any AEM Purchase Transaction or Third Party Purchase Transaction entered into pursuant to this Agreement, and “Transactions” means, collectively, AEM Sale Transactions and Third Party Purchase Transaction entered into pursuant to this Agreement.

“Transloaded Product” has the meaning set forth in Schedule 3 hereof.

“Transloading Fees” has the meaning set forth in Schedule 3 hereof.

“UCC” means the Texas Business and Commerce Code.

“Undelivered Volumes” has the meaning set forth in Section 5(b) of Schedule 2 hereof.

“Ultimate Sale” has the meaning set forth in Section 2.6(a) hereof.

“Unit” shall mean Barrel, MCF, Gallon or any other applicable any unit of measurement commonly used for the measurement of Hydrocarbons.

## ARTICLE 2 APPOINTMENT OF AEM; TERM; TERMINATION; AND RELATIONSHIP OF PARTIES

2.1 Dedication. Operator hereby agrees for the Term of this Agreement that is shall exclusively utilize AEM for marketing and selling all Dedicated Area Hydrocarbons for (i) purchase by AEM pursuant to AEM Purchase Transactions under this Agreement, or (ii) the facilitation of Third Party Purchase Transactions in accordance with the terms hereof. Notwithstanding anything to the contrary herein, nothing in this Section 2.1 shall be deemed to cause a Lien to arise or exist upon any Dedicated Area Leasehold or Dedicated Area Hydrocarbons in favor of AEM.

2.2 Term. The term of this Agreement shall commence on the Effective Date and unless sooner terminated as provided herein, shall remain in full force and effect until and including May 31, 2018 (the “Initial Term”), and shall continue for additional consecutive one year periods (each, an “Extension Period”) thereafter unless terminated by either Party upon 30 days advance written notice to the other Party prior to the end of the Initial Term or Extension Period, as applicable (the Initial Term, as may be extended, the “Term”). Notwithstanding the prior sentence, the Parties intend this Agreement to be coterminous with all other AEM Marketing Services Agreements and shall terminate upon written notice by either party if any other AEM Marketing Services Agreement terminates.

### 2.3 Procedures Upon Any Termination or Expiration.

(a) Upon expiration or earlier termination of the Term, all rights and obligations of the Parties under this Agreement shall terminate, except as set forth in this Section 2.3 and except for those rights and obligations that by their nature must survive for the benefit of the Party(ies) to which they run, including all provisions relating to billing and settlement as necessary to provide for the invoicing and payment of all amounts due as of any such termination date.

(b) Following the expiration or earlier termination of the Term, (i) each Party shall maintain all books and records in accordance with Section 7.1 until the later of (A) one year from the date on which this Agreement terminates or expires, (B) the expiration of such period as may be required by law or regulation, or (C) a final and unappealable resolution has been reached with respect to any dispute to which such books and records relate that is pending on the date as of which such books and records could otherwise be disposed; (ii) all rights and

obligations as set forth in Section 7.3 shall survive for 12 Months from the date of any termination or expiration; (iii) the Parties' obligations with respect to indemnity shall survive without limitation (provided that the Indemnifying Party may assert, or if the Indemnified Party is directing the proceeding the Indemnifying Party may require the Indemnified Party to assert, any and all defenses based on statutes of limitations and laches); (iv) ARTICLE 11, including as set forth in Section 11.1, all waivers and disclaimers of liability, indemnities, releases from liability, and limitations on liability expressed in such Article, shall survive termination or expiration of this Agreement (without limitation); (v) the rights and obligations of each Party with respect to confidentiality shall survive for a period of 36 Months from the date of termination or expiration of this Agreement as provided in Section 12.1; and (vi) the provisions of ARTICLE 15 shall survive as necessary for the continued orderly administration and wind-up of this Agreement and the Parties' rights and obligations under this Agreement.

(c) To the extent that any Transaction entered into during the Term of this Agreement is still in effect as of the date of termination or expiration of this Agreement (an "Outstanding Transaction"), (i) this Agreement, and any other documents executed or delivered hereunder shall remain in effect with respect to such Outstanding Transaction to the extent required for the administration of and fulfillment of such Outstanding Transaction (except as otherwise provided in Section 9.3(a)) until the earlier of (A) the date on which Parties have mutually agreed to substitute the provisions of one or more other agreements for the provisions of this Agreement or (B) all Transactions entered into during the Term of this Agreement have been settled, expired or terminated; and (ii) the time periods for survival set forth in Sections 2.3(a) and (b) shall be measured with respect to each Transaction from the date on which such Transaction terminated or expired (e.g., for example, such that the audit rights related to a Transaction that continues beyond the end of the Term will continue for twelve 12 Months after such Transaction ends). For the avoidance of doubt, AEM's appointment pursuant to Section 2.6 and all of AEM's obligations to perform the Services (other than as required to fulfill the terms of the Outstanding Transactions) shall cease as of the date on which the termination or expiration of the Agreement becomes effective; but the rights and obligations of the Parties necessary to administer such Outstanding Transactions, including the ability to declare a default, will survive pursuant to clause (i) of the first sentence of this Section 2.3(c).

#### 2.4 Relationship of Parties.

(a) Except as expressly provided in Section 2.6 and Section 5.2, neither Party is authorized to assume or create any obligation, liability or responsibility, expressed or implied, on behalf of or in the name of any other Party or to bind any other Party to any Third Party in any manner whatsoever. The relationship between the Parties is that of independent contractors. Any provision of this Agreement that appears to give Operator a measure of control over the details of the Services shall be deemed to mean that AEM shall follow the provisions hereof in order to accomplish the desires of Operator, but Operator shall look to AEM for results only and shall have no right at any time to direct or supervise AEM's servants or employees in the performance of such work (except as specified herein) or as to the manner, means, and method in which the Services are performed nor shall either Party bear any liability for the actions of the other Party, its Affiliates or their employees, officers, directors, agents or such other Persons acting under their direction. No Person employed by AEM shall be deemed to be an employee, agent or servant of Operator for any purpose.

(b) Producer and AEM acknowledge that they are not and never shall be partners, joint venturers or ever owe fiduciary duties to each other by virtue of this Agreement. Each Party agrees that it will not ever claim to be the partner of the other based on this Agreement. Each Party also acknowledges that the other Party is detrimentally relying upon the assurances states in this paragraph in both entering into this Agreement and in all of the Parties future interactions related to this Agreement. The provisions of this paragraph (i) may not be waived or altered by conduct or course of dealing and (ii) may only be waived or altered, if ever, in a written document signed by an officer of each Party.

2.5 Non-Circumvention. During the Term of this Agreement, Operator shall not enter into any agreement with any Third Party or any of Operator's Affiliates with respect to (i) the Services contemplated by this Agreement or any alternative transaction for the marketing of Dedicated Area Hydrocarbons that in either case would preclude a transaction contemplated by this Agreement, or (ii) the exchange, purchase, sale or marketing of any Dedicated Area Hydrocarbons except for Third Party Purchase Transactions and other activities undertaken in accordance with this Agreement and dispositions of the Dedicated Area Leasehold.

2.6 Appointment of AEM.

(a) For the Term of this Agreement, AEM is hereby duly appointed by Operator to act as sole and exclusive representative (in such capacity, "Agent") for all purposes with regards to negotiating and entering into agreements for the ultimate sale of Dedicated Area Hydrocarbons to Third Parties ("Ultimate Sale"), and AEM hereby accepts such appointment. For the avoidance of doubt, Ultimate Sales shall be accomplished either through (i) Corresponding Third Party Transactions pursuant to AEM Purchase Transactions or (ii) Third Party Purchase Transactions.

(b) Operator's appointment of AEM as its Agent under Section 2.6(a) may require the performance of scheduling, logistical or other operational support in connection with Ultimate Sales. As an integral part of such representative appointment, Operator agrees that once a transaction for the Ultimate Sale is executed, Operator is also expressly designating AEM as its agent for the purpose of taking those actions that AEM may reasonably deem necessary in the name of Operator in connection with the performance and administration of such transaction. Operator agrees to, or to use commercially reasonable efforts to cause Third Parties to, from time to time upon request from AEM, execute those certificates, notices or agreements reasonably necessary for AEM to perform its obligations as Operator's representative hereunder.

(c) Operator agrees, prior to the expiration or termination of the Term, and except during the occurrence and continuance of an AEM Event of Default, to refrain from taking any action, except as expressly provided herein, that would (i) revoke or alter the appointment of AEM as Operator's Agent set forth herein, or (ii) countermand, in any way reject (other than in accordance with ARTICLE 5) or otherwise repudiate any sale of Dedicated Area Hydrocarbons under an AEM Purchase Transaction that has been negotiated and entered into by AEM in compliance with the terms of this Agreement.

**ARTICLE 3**  
**CERTAIN RIGHTS AND RESPONSIBILITIES**

3.1 Operator's Rights and Responsibilities. Operator shall have the sole right, responsibility and obligation to:

- (a) determine and establish all development operations and production plans for Dedicated Area Hydrocarbons (generally, the "Production Plans");
- (b) determine the volume, quality, location, production and delivery schedule of Dedicated Area Hydrocarbons available to be marketed by AEM;
- (c) timely provide AEM with information reasonably necessary to enable AEM to comply with the delivery, scheduling and other requirements of any Ultimate Sale; and
- (d) promptly notify AEM of any condition, violation or other circumstance that would reasonably be expected to have a material adverse effect on Operator's ability to produce, deliver, sell or otherwise market Dedicated Area Hydrocarbons in a manner and at production levels consistent with past practice.

3.2 Designated Representatives. Operator and AEM shall each designate at least one Designated Representative. Operator's initial Designated Representative shall be Michael A. McCabe and AEM's initial Designated Representative shall be Vincent T. McConnell. Each Party's Designated Representative shall be authorized and empowered to act for and on behalf of such Party as to all obligations of such Party hereunder. Either Party may change its Designated Representative from time-to-time upon written notice to the other Party. Each Party shall be entitled to rely upon, and the other Party shall be bound by, the oral and written communications, directions, requests and decisions made by the then-acting Designated Representative of such Party with regard to this Agreement. Each Party acknowledges that the other Party's Designated Representative shall have no liability to it for any obligations of such other Party arising under this Agreement or as a result of any of such other Party's Designated Representative's communications, directions, and requests made in accordance with this Agreement.

**ARTICLE 4**  
**SERVICES**

4.1 Marketing Services. Pursuant to AEM's appointment under Section 2.6 but subject to limitations provided by this Agreement, AEM shall provide services for marketing of the Dedicated Area Hydrocarbons (collectively, the "Services"), including:

- (a) consulting with Operator as to Operator's production volume, quality, transportation, pricing and other customary terms to facilitate the marketing of the Dedicated Area Hydrocarbons hereunder;
- (b) identifying and originating opportunities for the sale of Dedicated Area Hydrocarbons with Third Parties that matches the quality, location and volume parameters of Operator's production from the Dedicated Area (i) pursuant to AEM's or Operator's existing trading agreements with such Third Parties, or (ii) by executing or facilitating new agreements to enable such sales, in each case in accordance with Sections 2.6, 5.1 and 5.2;



- (c) identifying and evaluating the creditworthiness of potential Third Party purchasers;
- (d) marketing all Dedicated Area Hydrocarbons of Operator for Ultimate Sale in accordance with Sections 2.6, 5.1 and 5.2;
- (e) providing other services related to the sale or marketing of the Dedicated Area Hydrocarbons as may be agreed to in writing by the Parties from time to time; and
- (f) providing to Operator, as requested and at each meeting pursuant to Section 7.2, any material information concerning new or significant changes in the Hydrocarbons markets and internally generated information regarding current and forward pricing of Hydrocarbons at the applicable reference points based on publicly available sources and other sources available to AEM for the balance of the Term (subject to AEM's confidentiality duties owed to Third Parties).

4.2 Performance of Services. AEM shall perform the Services in a professional and workmanlike manner and in its performance of the Services, shall use such personnel as are sufficient in number, adequately trained and qualified to perform the Services. In performing the Services, AEM shall undertake reasonable efforts to obtain a fair market price for the Dedicated Area Hydrocarbons. A determining as to whether AEM has satisfied its obligation under the preceding sentence with respect to a particular Transaction shall be based on the facts and circumstances existing at the time of entering into such Transaction, including general economic conditions, the general market conditions with respect to the Hydrocarbons to be delivered under such Transaction, and the quality, location, volume, duration and the other terms of such Transaction. AEM will perform the Services at its offices in Houston, Texas, or such other location as AEM's offices may be located from time to time and, from time to time, subject to Operator's approval, not to be unreasonably withheld, at Operator's offices and facilities.

## ARTICLE 5 ENTERING OF DEDICATED AREA HYDROCARBON SALES

5.1 Dedicated Area Hydrocarbons Sales Generally. AEM shall, consistent with its obligations under this Agreement, present to Operator either (i) specific AEM Purchase Transactions of Dedicated Area Hydrocarbons which are to be effected in accordance with Section 5.3 of this Agreement and Schedule 2 and where such Dedicated Area Hydrocarbons will be resold by AEM to Third Parties pursuant to one or more Corresponding Third Party Transactions, or (ii) proposed Third Party Purchase Transactions of Dedicated Area Hydrocarbons, in each case as provided in this ARTICLE 5. During the Term of this Agreement, all sales of Dedicated Area Hydrocarbons by Operator shall be made in one of the following methods: (a) in an AEM Purchase Transaction or (b) in a Third Party Purchase Transaction, and regardless of such method AEM shall be entitled to any applicable Marketing Fees.

### 5.2 Entering Dedicated Area Hydrocarbons Sales.

(a) Prompt Month Proposals and Intermediate Sale Proposals. AEM shall from time to time: (i) solicit and receive offers for Corresponding Third Party Transactions of

Dedicated Area Hydrocarbons and Third Party Purchase Transactions of Dedicated Area Hydrocarbons, (ii) analyze any responses or proposals in response to a solicitation, and (iii) promptly following any solicitation, submit to Operator by email such proposals for Dedicated Area Hydrocarbons sale opportunities, with such submission including, (A) the Commercial Terms, (B) other material information regarding any Third Party Purchase Transaction, including the form of any agreement requested by the Third Party (if available) and (C) other material information regarding any Corresponding Third Party Transaction, including the identity of the counterparty of such Corresponding Third Party Transaction (as a whole a "Sale Proposal"). With respect to a Sale Proposal where (w) no delivery obligations of Operator extend beyond the Prompt Sale Period and (x) all Hydrocarbons are to be sold at market or index derived prices (a "Prompt Month Proposal"), AEM is hereby granted all necessary authority to consummate both (1) the applicable Third Party Purchase Transactions and (2) any Corresponding Third Party Transactions for such Prompt Month Proposal unless Operator provides AEM notice (which may be electronic) of Operator's rejection of such Prompt Month Proposal within two Business Days after AEM's presentation of such proposal. With respect to a Sale Proposal, other than a Prompt Month Proposal, where (y) all delivery obligations of Operator that are within the Intermediate Sale Period and (z) all Dedicated Area Hydrocarbons are to be sold at market or index derived prices (an "Intermediate Sale Proposal"), AEM is hereby granted all necessary authority to consummate both (1) the applicable Third Party Purchase Transactions and (2) any Corresponding Third Party Transactions for such Intermediate Sale Proposal unless Operator provides notice (which may be electronic) of Operator's rejection of such Intermediate Sale Proposal within five Business Days after AEM's presentation of such proposal.

(b) Other Opportunities. With respect to all Sale Proposals that are not Prompt Month Proposals or Intermediate Sale Proposals (all such Proposals being an "Other Proposal"), AEM shall have no authority to enter any such Other Proposal unless Operator has provided AEM with electronic notice of Operator's acceptance of such Other Proposal within ten Business Days after AEM's presentation of such proposal and Operator's failure to provide such notice shall be deemed to be a rejection by Operator.

(c) Delivery Points. For any AEM Purchase Transaction, Third Party Purchase Transaction or Corresponding Third Party Transaction entered into pursuant to this Agreement, the delivery point shall be the Applicable Delivery Point.

5.3 AEM Purchase Transactions – Course of Dealing. All AEM Purchase Transactions of Dedicated Area Hydrocarbons will be entered into pursuant to this Section 5.3 and shall automatically incorporate the AEM Purchase Transaction Terms and Conditions set forth on of Schedule 2 attached hereto.

(a) AEM Purchase Transaction. Any AEM Purchase Transaction of Dedicated Area Hydrocarbons will be effectuated in writing, including by e-mail, electronic text message or other electronic data interchange with the offer and acceptance constituting the agreement of the Parties solely with respect to the Commercial Terms of such AEM Purchase Transaction and shall in no manner modify, amend or otherwise change any of the provisions of this Agreement (including any of the provisions of Schedule 2). The Parties agree that they shall

be legally bound, and may each rely thereon, from the time they mutually agree to the Commercial Terms of any such AEM Purchase Transaction.

(b) Transaction Confirmations. After the Parties have executed an AEM Purchase Transaction as contemplated in Section 5.3(a) above, AEM shall send a Confirmation of the AEM Purchase Transaction to Operator and unless Operator notifies AEM of an error or mistake in the Confirmation within two Business Days after it is received by Operator, the Confirmation shall be deemed to accurately memorialize the Parties agreement as to the AEM Purchase Transaction. If Operator timely objects to a Confirmation then the Parties agree to promptly endeavor in good faith to resolve such differences and correct the Confirmation, and such Confirmation will not become effective except upon mutual consent of the Parties. In the event of a conflict between the provisions of the documents that comprise an AEM Purchase Transaction of Dedicated Area Hydrocarbons, provided that Operator has not timely objected to a Confirmation, the provisions of the documents will take precedence, govern, and control the rights, obligations and duties of the Parties in the following order of priority: (i) the effective and applicable Confirmation for such AEM Purchase Transaction (but only with respect to the Commercial Terms); (ii) attachments to such Confirmation, if applicable (but only with respect to the Commercial Terms); (iii) Schedule 2 of this Agreement; then (iv) any other provision of this Agreement. For the avoidance of doubt, no terms contained in a Confirmation shall apply to the Agreement for any purpose other than with respect to the AEM Purchase Transaction documented therein and shall not amend, modify or otherwise alter the remainder of this Agreement for any purpose.

## ARTICLE 6 COMPENSATION; SETTLEMENT

6.1 Compensation. The price paid by AEM to Operator for all Dedicated Area Hydrocarbons in an AEM Purchase Transaction shall be equal to (i) the AEM Net Sales Price for such Dedicated Area Hydrocarbons minus (ii) the Marketing Fee therefor, in all cases determined on a per Unit basis. Operator agrees to pay AEM the Marketing Fee on Third Party Purchase Transactions of Dedicated Area Hydrocarbons, to the extent Operator receives the Operator Net Sales Price with respect thereto, and, on and after the date Operator receives the Operator Net Sales Price, if the relevant Marketing Fee has not previously been paid to AEM, AEM may apply the provisions of Section 6.2 with respect to such payment.

### 6.2 Payment Netting and Post-Termination Netting.

(a) Payment Netting. Payments will be made to the respective account specified on Annex I attached hereto. Notwithstanding any remedies otherwise available under Applicable Law, Operator and AEM hereby agree that they shall discharge mutual debts and payment obligations due and owing each other under AEM Marketing Agreements (the "Payment Obligations") through a monthly net settlement arrangement, as documented in a monthly settlement statement ("Monthly Settlement Statement") prepared by AEM and delivered to Operator on or before the fifteenth (15) day of the Month following the Month of sale unless the due date falls on a holiday or weekend, and in such cases the Monthly Settlement Statement shall be due on the first (1st) Business Day thereafter. The Monthly Settlement Statement will account for all amounts owed by each Party to the other Party arising out of or related to

reimbursements, interest, payments, credits or any obligations to make payment to the other Party arising out of this Agreement or any other AEM Marketing Agreement as of the end of the prior Month, including all Transactions, any Marketing Fees, Shortfall Damages and Remaining Volumes Costs and shall include supporting documentation acceptable in industry practice to support the amounts set forth therein. Operator may dispute the Monthly Settlement Statement, and any such dispute will be resolved in accordance with Section 6.4. All undisputed amounts shall, as of the payment date for such Month as determined in accordance with Section 6.3, be satisfied and discharged by netting (i) the aggregate amount payable by one Party under this Agreement or any other AEM Marketing Agreement, including all Transactions against (ii) the aggregate amount payable by the other Party under this Agreement or any other AEM Marketing Agreement, including all Transactions such that all such Payment Obligations are replaced with a single payment obligation whereby only the net difference between such amounts (the "Monthly Net Amount") shall be paid by the Party who owes the positive balance of such aggregate amounts (the "Paying Party") to the other Party (the "Payee Party") in accordance with this Agreement. The failure of Operator to dispute any Monthly Settlement Statement by the end of the applicable Month will not be deemed to be a waiver of any rights it has with respect to such Monthly Settlement Statement, and each Party reserves to itself all rights, setoffs, counterclaims and other remedies and defenses consistent with ARTICLE 11 (to the extent not expressly herein waived or denied) that such Party has or may be entitled to arising from or out of this Agreement or any other AEM Marketing Agreement. For the avoidance of doubt, all outstanding Transactions and transactions arising under any other AEM Marketing Agreement, and obligations to make payment in connection herewith or therewith may be offset against each other, set off or recouped therefrom.

(b) Post-Termination Netting. Upon termination or the expiration of this Agreement, billing, payment and netting for and any amounts due under this Agreement (including obligations pursuant to Transactions) shall continue in accordance with ARTICLE 6 of this Agreement, and the Parties shall net all amounts due between Operator and AEM arising under this Agreement (if any) and each and every Transaction that survives termination of this Agreement until such time, if ever, as the Parties enter into a separate netting agreement.

6.3 Payment Terms for Monthly Net Amount. The Monthly Net Amount shall be paid by the Paying Party to the Payee Party on or before the twentieth (20th) day of the Month following the Month of sale unless the due date falls on a holiday or weekend, and in such cases the payment shall due on the first Business Day thereafter.

6.4 Disputes and Adjustments of Monthly Settlement Statements. A Party may, in good faith, dispute the correctness of any Monthly Settlement Statement (as described in Section 6.2(a)), or any adjustment to a Monthly Settlement Statement rendered under this Agreement within 24 months after the delivery of such Monthly Settlement Statement or adjustment, as applicable. A Party may, but shall not be required to, make a payment with respect to a disputed amount and such payment will be without prejudice to its rights to dispute any Monthly Settlement Statement in accordance with this Section 6.4. Any dispute or adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two Business Days of such resolution along with interest accrued at the Interest Rate from and including the due date to but excluding the

date paid. Inadvertent overpayments shall be returned upon request or, at the request of the Party that made the overpayment, deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment; provided that any overpayment by Provider or underpayment by AEM that results from a material error made by AEM will be repaid with interest accruing at the Default Rate. For purposes of the preceding sentence, an error resulting from the erroneous reporting of the AEM Net Sales Price or an error in the calculation of the aggregate Marketing Fee in any month that exceeds 10% of the actual Marketing Fee due with respect to such Month shall be deemed to be material. Any dispute with respect to a Monthly Settlement Statement is waived unless the other Party is notified in accordance with this Section within 24 months after the Monthly Settlement Statement is rendered or any specific adjustment is made.

## ARTICLE 7 REPORTS, RECORDS, MEETINGS, AUDITS AND AVAILABILITY

7.1 Books and Records. AEM shall maintain records relating to the Services and Transactions, and retain written and electronic records (which shall include recorded phone conversations to the extent recorded in the normal course of business) for at least two (2) years or such longer period to the extent required by Applicable Laws. Without limiting the foregoing, AEM shall maintain records of the Services and Transactions, including all information necessary and useful in the preparation of the Monthly Settlement Statements, for no less than three years after the termination or expiration of this Agreement. To the extent permitted by its internal practices, AEM shall ensure that such books and records are kept separate from its own books and records. Where records relate to disputes, appeals, litigation or the settlement of claims arising out of the performance of this Agreement, such records shall be maintained until the final, non-appealable resolution of the matter giving rise to the dispute. This Section 7.1 shall survive the termination of this Agreement as specified in Section 2.3.

7.2 Meetings. Designated Representatives for AEM and Operator shall meet in person or by conference call no less than four times per year.

7.3 Audits.

(a) Each Party or any representative of a Party has the right, upon no less than ten Business Days prior written notice to the other Party and at its sole expense and during normal working hours, to examine all the relevant records of the other Party, including written and electronic records, to the extent necessary to verify compliance with the provisions of this Agreement, and the accuracy of any payments, charge or computation made pursuant to the provisions of this Agreement. In addition, AEM shall, at Operator's written request, make available to Operator any and all records and documents, whether written or electronic, relating to any Corresponding Third Party Transactions. The Party that is subject to an audit under this Section has an obligation to reasonably assist the auditing Party in conducting such audit. Such audit shall occur no more often than once per calendar year.

(b) If any audit conducted under Section 7.3(a) reveals any inaccuracy in any payments, the necessary adjustments and payments, if any, related thereto will be promptly

made; provided, however, that no adjustment or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twenty-four (24) Months from the rendition of the last payment under this Agreement; and provided further that this Section 7.3 will survive any termination of this Agreement for a period of twenty-four (24) Months from the date of delivery of the last payment under this Agreement. Each Party shall preserve all records held by it for the duration of the referenced audit periods. Information obtained by either Party's representatives in examining the other Party's applicable records to verify such billings and payments shall not be disclosed to Third Parties except as provided in Section 12.2.

## ARTICLE 8 FORCE MAJEURE

8.1 Procedure For Calling Force Majeure. If one Party wishes to claim relief from the performance of its obligations arising under this Agreement on account of any event or circumstance of Force Majeure (hereinafter, the "Affected Party"), then the Affected Party shall give written notice to the other Party of such event or circumstance as soon as reasonably practicable after becoming aware of such event or circumstance. Each notice served by an Affected Party to the other Party pursuant to this ARTICLE 8 shall specify the event or circumstance of Force Majeure in respect of which the Affected Party is claiming relief and the steps being taken to mitigate and overcome the effects of such event or circumstances. The Affected Party shall, by reason of any event or circumstance of Force Majeure in respect of which it has claimed relief under this Section 8.1: (i) use its commercially reasonable efforts to mitigate the effects of such Force Majeure and to remedy any inability to perform its obligations hereunder due to such events as promptly as reasonably practicable; provided that it; (A) not be obliged to take any steps that would not be in accordance with reasonably prudent practice or Applicable Laws or that would be beyond its control; and (B) not be required to settle any strikes or other labor disputes; (ii) furnish periodic reports to the other Party regarding the progress in overcoming the adverse effects of such event of Force Majeure and setting forth its best, good faith estimate concerning when it will be able to resume the performance of its obligations under this Agreement; and (iii) resume the performance of its obligations under this Agreement as soon as is reasonably practicable after the events of Force Majeure are remedied or cease to exist. Where the Force Majeure involves interruption and unavailability of Operator's means of transporting Dedicated Area Hydrocarbons to or from an Applicable Delivery Point pursuant to an AEM Purchase Transaction, Operator shall have no obligation to seek alternative means of transportation unless the cost and transit time of such substitute transportation to Operator is materially equivalent to, or less than, the cost and transit time, respectively, of the interrupted means of transport, in which case Operator shall use commercially reasonable efforts to deliver the Dedicated Area Hydrocarbons via substitute transportation.

### 8.2 Performance Suspended.

(a) During the continuance of any Force Majeure, the obligations of an Affected Party under this Agreement, other than any obligation of either Party to pay money when due under the terms of this Agreement, shall be suspended to the extent such condition results in the Affected Party's inability to perform its obligations. If such Force Majeure event has not ended and the Affected Party has not resumed performance within one hundred eighty

(180) consecutive days from the commencement of such Force Majeure event, the non-Affected Party may elect to terminate this Agreement upon thirty (30) days' notice to the Affected Party.

(b) In addition, if AEM suspends its performance under this Agreement, whether due to a Force Majeure or otherwise, notwithstanding the restrictions set forth in Section 2.1, Operator may, to the extent AEM has suspended its marketing and purchase obligations under this Agreement, market and sell the affected Dedicated Area Hydrocarbons through alternative means, and, except for AEM suspensions resulting from a Operator Event of Default or Operator suspending its performance under this Agreement due to an event or circumstance of Force Majeure, no Marketing Fees will be payable with respect thereto.

8.3 End of Force Majeure Event. When the Affected Party is able, or would have been able if it had complied with its obligations under Sections 8.1 and 8.2, to resume the performance of all of its obligations under this Agreement affected by the occurrence of an event or circumstance of Force Majeure, then the period of Force Majeure relating to such event or circumstance shall be deemed to have ended.

## ARTICLE 9 EVENTS OF DEFAULT AND TERMINATION FOR DEFAULT

9.1 AEM Events of Default. The occurrence of any one or more of the following events shall constitute an AEM Event of Default ("AEM Event of Default") under this Agreement:

(a) the failure by AEM to make, when due, any payment required under this Agreement if such failure is not remedied within five (5) Business Days after written notice of such failure is received by AEM; provided that the payment is not the subject of a good faith dispute as described in the billing and payment provisions under ARTICLE 6 hereof;

(b) the failure by AEM to perform any material covenant or agreement by such Party set forth in this Agreement or an Ancillary Agreement and such failure is not cured within ten (10) Business Days after written notice is received by AEM;

(c) AEM shall become Bankrupt;

(d) AEM shall either (i) fail to maintain in full force and effect any material Regulatory Approval necessary for the performance of the Services hereunder or for the purchase and sale of Hydrocarbons or (ii) become subject to an order by any Governmental Authority whereby such Governmental Authority revokes or suspends any Regulatory Approval necessary for the performance of the Services hereunder or for the purchase and sale of Dedicated Area Hydrocarbons;

(e) any representation or warranty of AEM set forth in this Agreement proves to have been incorrect in any material respect when made such as to have a material adverse effect on Operator and such adverse impact cannot be cured or AEM fails to cure such adverse impact within ten (10) Business Days after notice thereof by Operator; or



(f) AEM shall persistently over a period of at least 90 days (a "Test Period") fail to obtain a market price for Dedicated Area Hydrocarbons in Transactions entered into during such Test Period at least equal to the average market price obtained by a mutually agreed upon basket of operators, as determined on a Transaction by Transaction basis, that produce and sell Hydrocarbons in the same county as the Dedicated Area Hydrocarbons for sales of Hydrocarbons having substantially the same Commercial Terms other than price.

9.2 Operator Events of Default. The occurrence of any one or more of the following events shall constitute an Operator Event of Default ("Operator Event of Default") under this Agreement:

(a) the failure by Operator to make, when due, any payment required under this Agreement if such failure is not remedied within five (5) Business Days after written notice of such failure is received by Operator; provided, that the payment is not the subject of a good faith dispute as described in the billing and payment provisions under ARTICLE 6 hereof;

(b) the failure by Operator to perform any material covenant or agreement by such Party set forth in this Agreement or any Ancillary Agreement and such failure is not cured within ten (10) Business Days after written notice is received by Operator;

(c) Operator shall become Bankrupt;

(d) Operator shall either (i) fail to maintain in full force and effect any material Regulatory Approval necessary to sell Dedicated Area Hydrocarbons to AEM or (ii) become subject to an order by any Governmental Authority whereby such Governmental Authority revokes or suspends any Regulatory Approval necessary for the operation of its Hydrocarbon properties in the Dedicated Area; or

(e) any representation or warranty of Operator set forth in this Agreement proves to have been incorrect in any material respect when made such as to have a material adverse effect on AEM and such adverse impact cannot be cured or Operator fails to cure such adverse impact within ten (10) Business Days after notice thereof by AEM.

9.3 Rights of Non-Defaulting Party.

(a) When an Event of Default has occurred and is continuing, the Non-Defaulting Party shall have the right, but not the obligation, to designate by notice, a day, no earlier than the day after such notice is effective and no later than 60 days after such notice is effective (the "Termination Notice"), to terminate this Agreement and any AEM Purchase Transactions of Dedicated Area Hydrocarbons effected pursuant hereto and pursue any other remedy at law, in equity, or as provided under this Agreement. The Termination Notice shall specify in reasonable detail the circumstances giving rise to the Termination Notice.

(b) When an Event of Default has occurred and is continuing under Section 9.1(f), or if AEM breaches its representations, warranties or covenants under this Agreement in any way that would reasonably be expected to result in the inability of AEM to perform the Services in accordance with ARTICLE 4 or to consummate Transactions, in either case for a period of five days (regardless of whether such failure results in an Event of Default), Operator may, notwithstanding the restrictions set forth in Section 2.1, market and sell Dedicated Area Hydrocarbons through alternative means and no

Marketing Fees will be payable with respect thereto until such Event of Default or other such circumstance is remedied.

(c) To the extent the Non-Defaulting Party terminates this Agreement and any AEM Purchase Transactions pursuant to Section 9.3(a), the Non-Defaulting Party shall net and set off any resulting Payment Obligations against any amounts due or owing hereunder or under any Ancillary Agreement on the date designated by the Non-Defaulting Party as the termination date in the Termination Notice. Otherwise, all Outstanding Transactions, if any, shall continue in effect subject to Section 2.3.

## ARTICLE 10 INDEMNIFICATION

10.1 Indemnification By AEM. Subject to Operator's obligations under Section 6(b) of Schedule 2 hereto, AEM shall indemnify, defend and hold harmless ("indemnify" or "indemnification") the Operator Indemnified Parties from and against any and all suits, actions, liabilities, legal proceedings, claims, demands, penalties, fines, losses, costs and expenses of whatsoever kind or character including reasonable attorneys' fees and expenses (collectively, "Damages") arising from or on account of bodily injury, death or damage to property that occur after delivery of Dedicated Area Hydrocarbons (as determined in accordance with Schedule 2) from Operator to AEM at the Applicable Delivery Point under this Agreement, REGARDLESS OF CAUSE.

10.2 Indemnification By Operator. Operator shall indemnify, defend and hold harmless the AEM Indemnified Parties from and against any and all Damages arising from or on account of bodily injury, death or damage to property which occurs prior to or during the delivery of Dedicated Area Hydrocarbons (as determined in accordance with Schedule 2) to AEM at the Applicable Delivery Point under this Agreement, REGARDLESS OF CAUSE.

10.3 "REGARDLESS OF CAUSE". "REGARDLESS OF CAUSE" MEANS WITHOUT REGARD TO THE CAUSE OR CAUSES OF ANY CLAIM, EVEN THOUGH A CLAIM IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT, COMPARATIVE, CONTRIBUTORY, ACTIVE OR PASSIVE), STRICT LIABILITY, OR OTHER FAULT (BUT SPECIFICALLY EXCLUDING THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY INDEMNIFIED PARTY) OF ANY AEM INDEMNIFIED PARTY, OPERATOR INDEMNIFIED PARTY, AND/OR THIRD PARTY.

10.4 Insurance. To the extent and only to the extent the indemnity obligations contained in this ARTICLE 10 are governed by Chapter 127, Texas Civil Practice & Remedies Code (as the same may be amended from time to time), AEM and Operator will each support their respective mutual indemnity obligations by furnishing liability insurance coverage (or qualified self-insurance), of the types set forth in Annex II hereof, obtained by each of AEM and Operator for the benefit of the other and, in the case of AEM, the Operator Indemnified Parties or, in the case of Operator, the AEM Indemnified Parties.

**ARTICLE 11**  
**LIMITATION OF LIABILITY; DAMAGES THAT ARE LIQUIDATED**

11.1 General Limitations of Liability. NOTWITHSTANDING ANYTHING CONTAINED HEREIN AND REGARDLESS OF THE LEGAL OR EQUITABLE BASIS OF ANY CLAIM, IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING OUT OF OR RELATING TO THIS AGREEMENT; provided, however, (i) nothing in this Section 11.1 shall limit either Party's rights or obligations in respect of the indemnification provisions set forth in ARTICLE 10 hereof and Section 6(b) of Schedule 2 or the collection of damages that are liquidated as expressly provided in this Agreement and (ii) the Parties agree that Shortfall Damages and Remaining Volumes Costs are direct damages for purposes of this Agreement. The Parties further agree that the waivers and disclaimers of liability, indemnities, releases from liability, and limitations on liability expressed herein shall survive termination or expiration of this Agreement, and shall apply at all times, whether in contract, equity, tort or otherwise.

11.2 Limitation of Operator's Liability. AEM understands and agrees that, notwithstanding anything to the contrary in this Agreement, (i) no claim shall be made against any Affiliate, employee, shareholder, partner, member, agent, representative, consultant, officer or director, whether past, present or future, of Operator or any Affiliate of Operator in connection with this Agreement; (ii) there shall be absolutely no personal liability or recourse for the payment of any amounts due hereunder, or the performance of any obligations hereunder against any Affiliate, employee, shareholder, partner, member, agent, representative, officer or director, whether past, present or future, of Operator or any Affiliate of Operator, irrespective of any failure to comply with the provisions of this Agreement; (iii) AEM shall look solely to the assets of Operator for the satisfaction of each and every remedy of AEM in the event of any breach of this Agreement by Operator; (iv) AEM shall have no right to any claim under this Agreement against Operator for any capital contributions from any Affiliate, shareholder, partner or member, whether past, present or future, of Operator or any Affiliate of Operator; and (v) the provisions of clauses (i) through (iv) above are made expressly for the benefit of Affiliates, employees, shareholders, partners, members, agents, representatives, officers and directors, whether past, present or future, of Operator or any Affiliate of Operator.

11.3 Limitation of AEM's Liability. Operator understands and agrees that, notwithstanding anything to the contrary in this Agreement (i) no claim shall be made against any Affiliate, employee, shareholder, partner, member, agent, representative, consultant, officer or director, whether past, present or future, of AEM or any Affiliate of AEM in connection with this Agreement; (ii) there shall be absolutely no personal liability or recourse for the payment of any amounts due hereunder, or the performance of any obligations hereunder against any Affiliate, employee, shareholder, partner, member, agent, representative, officer or director, whether past, present or future, of AEM or any Affiliate of AEM, irrespective of any failure to comply with the provisions of this Agreement; (iii) Operator shall look solely to the assets of AEM for the satisfaction of each and every remedy of Operator in the event of any breach of this Agreement by AEM; (iv) Operator shall have no right to any claim under this Agreement against AEM for any capital contributions from any Affiliate, shareholder, partner or member, whether past, present or future, of AEM or any Affiliate of AEM; and (v) the provisions of clauses (i)

through (iv) above are made expressly for the benefit of Affiliates, employees, shareholders, partners, members, agents, representatives, officers and directors, whether past, present or future, of AEM or any Affiliate of AEM.

## ARTICLE 12 CONFIDENTIALITY

12.1 Non-Disclosure. Except as provided in Section 12.2, each Party (as the “Receiving Party”) agrees to hold in confidence, and not use except in connection with this Agreement, any information imparted to it by the other Party (the “Disclosing Party”) that (a) pertains to the Disclosing Party, or its business activities in any manner, including proprietary processes (including analytics, models and frameworks), technical information and know-how, information concerning the Disclosing Party’s management policies, economic policies, financial and other data or (b) with respect to Operator, pertains to Operator’s business, including geological data, reserve data, samples, logs, engineering studies and all other information or analyses, maps, aggregations of data, environmental impact reports, reports and data relating to or affecting the real property owned or leased by Operator or any of its subsidiaries (clauses (a) and (b) are referred to herein as “Confidential Information”). Confidential Information shall not include (i) information that is publicly available (other than as a result of a breach of terms of this Agreement), (ii) information developed by the Receiving Party without reliance upon or access to the Confidential Information of the Disclosing Party, or (iii) information obtained by the Receiving Party from a Third Party not under an obligation of nondisclosure to the Disclosing Party, and was not received, to the knowledge of the Receiving Party, as a direct or indirect result of any disclosure thereof in violation of any obligation of any Third Party not to disclose such information. This obligation shall continue to remain in full force and effect during the Term of this Agreement and for 36 Months after the date of termination or expiration of this Agreement. On and after the earlier of the expiration or termination of this Agreement, the Receiving Party shall return or destroy all Confidential Information received from the Disclosing Party (unless such Receiving Party is obligated to retain such Confidential Information pursuant to item (i) of Section 2.3(b) or Section 7.1, in which case such Receiving Party shall return or destroy such Confidential Information upon the expiration of the Receiving Party’s obligations under item (i) of Section 2.3(b) or Section 7.1, as the case may be). Notwithstanding the foregoing, Receiving Party may retain copies of Confidential Information for such period as may be required by any Applicable Law or applicable regulations or industry standards, or in accordance with the regular ongoing records retention process of the Receiving Party, including Confidential Information transferred and maintained electronically (including e-mails) which may be automatically archived or stored by Receiving Party on electronic devices, magnetic tape, or other media for the purpose of restoring data in the event of a system failure.

### 12.2 Permitted Disclosure.

(a) A Receiving Party shall have the right to disclose Confidential Information of the Disclosing Party (i) to the extent required by Applicable Law or legal process or to any Governmental Authority requiring or requesting such information; and (ii) in any litigation arising in connection with this Agreement; provided that, in each case: (A) such Confidential Information is disclosed only to the extent required by law, rule, regulation, procedure, subpoena, court order or court requirement, or material to the issues involved in or

determinative to the outcome of such litigation arising in connection with this Agreement; (B) such Confidential Information is submitted under any applicable provisions for confidential treatment by any Governmental Authority to which it is disclosed; and (C) the Receiving Party shall first (1) give the Disclosing Party as much prior notice of disclosure as is reasonably practicable, or if prior notice is not reasonably practicable, then as expeditiously as possible, to permit the Disclosing Party to seek any protective order or other confidentiality protection as the Disclosing Party, in its sole discretion and at its sole expense, may elect to seek; and (2) except insofar as the Receiving Party is seeking to disclose the Confidential Information of the Disclosing Party in any litigation arising in connection with this Agreement, reasonably cooperate with the Disclosing Party in protecting the Confidential Information of the Disclosing Party that is to be disclosed, with such duty of cooperation not requiring the Receiving Party to initiate or participate in any litigation or incur more than de minimis costs or expenses.

(b) A Receiving Party shall have the right to disclose Confidential Information of the Disclosing Party to (i) its advisors, auditors, legal counsel and insurers; (ii) its Affiliates; (iii) bona fide potential purchasers of an interest in the Receiving Party; provided, however, any such Person receiving any Confidential Information shall be advised to maintain the confidentiality of and use such Confidential Information in accordance with the terms hereof, and the Receiving Party shall be responsible for the actions of any such Persons to whom it discloses Confidential Information of the Disclosing Party as though committed by the Receiving Party itself.

### **ARTICLE 13 REPRESENTATIONS AND WARRANTIES; COVENANTS**

13.1 AEM Representations and Warranties. AEM represents and warrants to Operator as of the Effective Date that:

(a) it is (i) a limited liability company duly formed, validly existing and in good standing under the laws of the State of Delaware, and (ii) qualified to do business and is in good standing in each jurisdiction in which it is required to be so qualified and the failure to be so qualified would materially adversely affect Operator or the ability of AEM to perform its obligations hereunder;

(b) this Agreement constitutes (or in the case of a Transaction, will constitute) a legal, valid and binding obligation of AEM, except as enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally, and (ii) general principles of equity;

(c) the execution, delivery and performance of this Agreement by AEM has been duly authorized by all requisite action and does not and will not conflict with any provisions of its organizational documents, any Applicable Law, or any material agreement or instrument to which AEM is a party or by which it, its property or assets may be bound or affected;

(d) neither the execution and delivery of this Agreement by AEM, nor the consummation by AEM of any of the transactions contemplated hereby, requires the consent or

approval of, the giving of notice to, the registration with, the recording or filing of any document with, or the taking of any other action in respect of any Governmental Authority, except those that have been duly obtained and are in full force and effect or not yet required, but that AEM believes will be readily obtainable in the ordinary course of business upon due application therefor or those that the failure to obtain would not materially and adversely affect the performance of its obligations hereunder.

(e) it is financially solvent, able to pay its debts as they mature and possessed of sufficient working capital to perform its obligations under this Agreement;

(f) it is not a party to any legal, administrative, arbitral, investigatorial or other proceeding or controversy pending, or to the best of its knowledge, threatened, that would materially adversely affect its ability to perform its obligations hereunder; and

(g) it is capable, and has such personnel and resources adequate, to perform the Services in accordance herewith.

13.2 Operator Representations and Warranties. Operator represents and warrants to AEM as of the Effective Date that:

(a) it is (i) a limited partnership duly formed, validly existing and in good standing under the laws of the State of Texas and (ii) qualified to do business and is in good standing in each jurisdiction in which it is required to be so qualified and the failure to be so qualified would materially and adversely affect AEM or the ability of Operator to perform its obligations hereunder;

(b) this Agreement constitutes (or in the case of a Transaction, will constitute) the legal, valid and binding obligation of Operator, except as enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally and (ii) general principles of equity;

(c) the execution, delivery and performance of this Agreement by Operator has been duly authorized by all requisite action and does not and will not conflict with any provisions of its organizational documents, any Applicable Law, or any material agreement or instrument to which Operator is a party or by which it, its property or assets may be bound or affected;

(d) neither the execution and delivery of this Agreement by Operator, nor the consummation by Operator of any of the transactions contemplated hereby, including Third Party Purchase Transactions, requires the consent or approval of, the giving of notice to, the registration with, the recording or filing of any document with, or the taking of any other action in respect of any Governmental Authority, except those that have been duly obtained and are in full force and effect or not yet required, but that Operator believes will be readily obtainable in the ordinary course of business upon due application therefor or those that the failure to obtain would not materially and adversely affect the performance of its obligations hereunder;

(e) it is financially solvent, able to pay its debts as they mature and possessed of sufficient working capital to perform its obligations under this Agreement; and

(f) it is not a party to any legal, administrative, arbitral, investigational or other proceeding or controversy pending, or to the best of its knowledge, threatened, that would materially adversely affect its ability to perform its obligations hereunder.

13.3 Covenants.

(a) By AEM. AEM covenants that throughout the Term of this Agreement:

(i) AEM shall comply in all material respects with all Applicable Law requirements as required, so as not to have a material adverse effect on Operator;

(ii) AEM shall maintain the workforce and infrastructure necessary to perform its obligations pursuant to the Transactions and this Agreement;

(iii) AEM shall timely perform all material covenants or agreements to be performed by AEM under all Corresponding Third Party Transactions; and

(iv) AEM shall act in good faith with respect to its obligations under this Agreement.

(b) By Operator. Operator covenants that throughout the Term of this Agreement:

(i) Operator shall comply with all Applicable Law (including Environmental Laws) requirements as required, so as not to have a material adverse effect on AEM;

(ii) Operator shall maintain the workforce and infrastructure necessary to perform its obligations pursuant to the Transactions and this Agreement;

(iii) Operator shall timely perform all material covenants or agreements to be performed by Operator under all Third Party Purchase Transactions; and

(iv) Operator shall act in good faith with respect to its obligations under this Agreement.

13.4 Most Favored Nation. If during the term of this Agreement AEM enters into an AEM Marketing Agreement or an AEM Marketing Agreement is amended to provide substantially the same services, under similar conditions and non-financial terms, as the Services on better financial terms to Operator than those set forth in this Agreement, then this Agreement will be amended, effective as of the date of such agreement or amendment, to extend such better financial terms to Operator hereunder.

**ARTICLE 14**  
**FINANCIAL PERFORMANCE**

14.1 UCC Waiver. Notwithstanding anything to the contrary contained herein, the Parties agree that this Agreement embodies all requirements of each Party with respect to credit



for any transaction hereunder, and each Party waives any right it may have with respect to any Transaction pursuant to this Agreement under (i) Section 2-609 of the UCC to demand adequate assurances from the other Party or (ii) any other similar right under common law or otherwise.

## ARTICLE 15 MISCELLANEOUS

15.1 No Reliance. In connection with the negotiation of, the entering into, and the confirming of the execution of, this Agreement each Party represents and warrants that (i) it is acting as principal (and not as agent or in any other capacity, fiduciary or otherwise); (ii) except with respect to the Services rendered by AEM as Agent, the other Party is not acting as a fiduciary for it; (iii) the other Party is not acting as a financial or investment advisor for it; (iv) it is not relying upon any representations (whether written or oral) of the other Party other than the representations expressly set forth in this Agreement; (v) the other Party has not given to it (directly or indirectly through any other person) any advice, counsel, assurance, guaranty, or representation whatsoever as to the expected or projected success, profitability, return, performance, result, effect, consequence, or benefit (either legal, regulatory, tax, financial, accounting, or otherwise) of this Agreement; (vi) it has consulted with its own legal, regulatory, tax, business, investment, financial, and accounting advisors to the extent it has deemed necessary, and it has made its own decisions based upon its own judgment and upon any advice from such advisors as it has deemed necessary, and not upon any view expressed by the other party; (vii) all decisions have been the result of arm's length negotiations between the parties; and (viii) it is entering into this Agreement with a full understanding of all of the risks hereof and thereof (economic and otherwise), and it is capable of assuming and willing to assume (financially and otherwise) those risks.

15.2 Entire Agreement; Notices. This Agreement, together with the Confirmations, Exhibits, Schedules and Annexes thereto contains the complete agreement between Operator and AEM with respect to the provision of the Services and Transactions described herein and supersedes all other agreements, whether written or oral, with respect to the matters contained herein. The Parties agree, and have given consideration in reliance, that the Agreement, together with all Confirmations, constitute a single integrated agreement. The Parties agree that this Agreement constitutes an agreement for forward sale between forward contract merchants and as such is a forward contract and that all transfers contemplated under the Agreement are "settlement payments" as defined in the Bankruptcy Code.

15.3 Notice. Except as otherwise specifically provided herein to the contrary, all notices, invoices, payments, and other communications made under this Agreement ("Notice") shall be in writing and sent to the appropriate individuals at the addresses set forth on Annex I attached hereto. Notice shall be given when received on a Business Day by the addressee. In the absence of proof of the actual receipt date, the following presumptions will apply: (i) Notices sent by electronic means, including facsimile and electronic mail shall be deemed to have been received upon the sending Party's receipt of its confirmation of successful transmission, such as facsimile machine's confirmation or the "return receipt requested" function for electronic mail, provided, that if the day on which such electronic communication is received is not a Business Day or is after five (5:00) p.m. local time at the recipient Party's address on Annex I on a Business Day, then such electronic communication shall be deemed to have been received on the

next following Business Day; (ii) Notice sent by overnight mail or courier shall be deemed to have been received on the next Business Day after it was sent or such earlier time as confirmed by the receiving Party or courier; and (iii) Notice sent by first class mail, postage prepaid, shall be deemed received five (5) Business Days after mailing.

15.4 Additional Documents and Actions; Amendment. Each Party agrees to execute and deliver from time to time such additional documents, and take such additional actions, as may be reasonably required by the other to effect the purposes of this Agreement. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same agreement. Unless otherwise provided herein, no modification, amendment, or other change to this Agreement, Exhibits, Schedules or Annexes, will be binding on any Party unless consented to in writing (specifically including any such purported amendment made orally, in writing, by email or otherwise) and which is executed in writing by duly authorized representatives of both Parties, which consent may be granted or withheld in the sole discretion of such Party. Any attempted modification, amendment or other change to this Agreement that is not in strict compliance with the requirements of this Section 15.4 is void *ab initio*.

15.5 Assignment. This Agreement binds and inures to the benefit of the Parties and their respective successors and assigns. No assignment or transfer of this Agreement, in whole or in part, shall be made without the prior written consent of the non-assigning Party, not to be unreasonably withheld or delayed; provided, however, that no assignment of this Agreement by either Party shall relieve the assignor of any obligation, duty or liability hereunder except to the extent such Party is expressly released in writing from any such obligation, duty or liability by the other Party. Operator may terminate this Agreement upon any Change of Control of AEM, other than with the prior written consent of Operator. Any attempted assignment, of this Agreement that is not in strict compliance with the requirements of this Section 15.5 is void *ab initio*.

15.6 Regulatory Event. If any provision of this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, or declared or rendered unlawful by any applicable court of law or regulatory agency or deemed unlawful because of a statutory or regulatory change (individually or collectively, such events referred to as a "Regulatory Event"), such Regulatory Event shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement nor otherwise affect the remaining lawful obligations that arise under this Agreement. Further, if a Regulatory Event occurs, the Parties shall use commercially reasonable efforts to modify this Agreement in order to give effect to the original intention of the Parties. Notwithstanding the foregoing, if as a result of a Regulatory Event, a Party is excused from any payment or performance obligation, the other Party shall be correspondingly excused from any payment or performance obligation that would have arisen but for the failure or inability of the other Party to perform.

15.7 Waiver; Third Party Beneficiaries. Failure by either Party to exercise any of its rights under this Agreement shall not constitute a waiver of such rights. None of the provisions of this Agreement shall be considered waived by a Party (by course of dealing or otherwise) unless such waiver is in writing and signed by such Party. No waiver shall be construed as a modification of any of the provisions of this Agreement or as a waiver of any default (present or

future) hereunder or breach hereof, except as expressly stated in such waiver. Except as expressly provided in Sections 11.2 and 11.3, this Agreement is for the sole and exclusive benefit of the Parties hereto and shall not create a contractual relationship with, or cause of action in favor of, any other Third Party.

15.8 Captions; Exhibits and Schedules. The captions contained in this Agreement are for convenience and reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained herein. The headings are inserted for convenience and are to be ignored for the purposes of construction. The Exhibits and Schedules to this Agreement form part of this Agreement and will be of full force and effect as though they were expressly set forth in the body of this Agreement.

15.9 Governing Law, Venue and Jury Trial.

(a) THIS AGREEMENT AND EACH AEM PURCHASE TRANSACTION OF DEDICATED AREA HYDROCARBONS EFFECTED PURSUANT HERETO SHALL BE INTERPRETED AND CONSTRUED ACCORDING TO THE LAWS OF THE STATE OF TEXAS, EXCLUSIVE OF ITS CONFLICTS OF LAWS PRINCIPLES. Each Party hereby irrevocably and unconditionally consents to and submits to the jurisdiction of the state and federal courts located in Harris County, Texas, in any action or proceeding arising out of or relating to this Agreement and agrees that all claims in respect of the action or proceeding shall be heard and determined in any such court. Each Party also agrees not to bring any action or proceeding arising out of or relating to this Agreement in any other court or tribunal. Each Party waives any defense of inconvenient forum to the maintenance of any such action or proceeding so brought. Each Party agrees to frame any complaint brought in any such action or proceeding to support federal court jurisdiction if grounds for federal jurisdiction exist, and further agrees that the other Party may require such Party to dismiss any state law case where a federal court would have jurisdiction over the subject matter.

(b) TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AGREEMENT AND FOR ANY COUNTERCLAIM THERETO.

15.10 Usury Savings. Notwithstanding any other term contained herein to the contrary, it is the intention of Operator and AEM to conform strictly to any applicable usury laws. Accordingly, if any Party contracts for, charges, or receives any consideration that constitutes interest in excess of the Highest Lawful Rate, then any such excess shall be canceled automatically and, if previously paid, shall at the paying Party's option be applied to any outstanding amount owed to such Party or be refunded to the other Party. In determining whether any interest exceeds the Highest Lawful Rate, such interest shall, to the extent permitted by applicable law, be amortized, prorated, allocated, and spread in equal parts throughout the term of this Agreement.

15.11 Conflicts. In the event of any conflict between the provisions of this Agreement and the provisions of any other AEM Marketing Agreement which was executed (including any

amendment thereto) prior to the Effective Date hereof, then the provisions of this Agreement shall control.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Marketing Services Agreement to be executed by a duly authorized officer as of the date first written above.

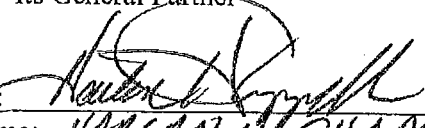
"AEM"

ARM ENERGY MANAGEMENT, LLC,  
a Delaware limited liability company

By:   
Name: Vincent T. McConnell *Each here*  
Title: ~~President~~ CEO

"OPERATOR"

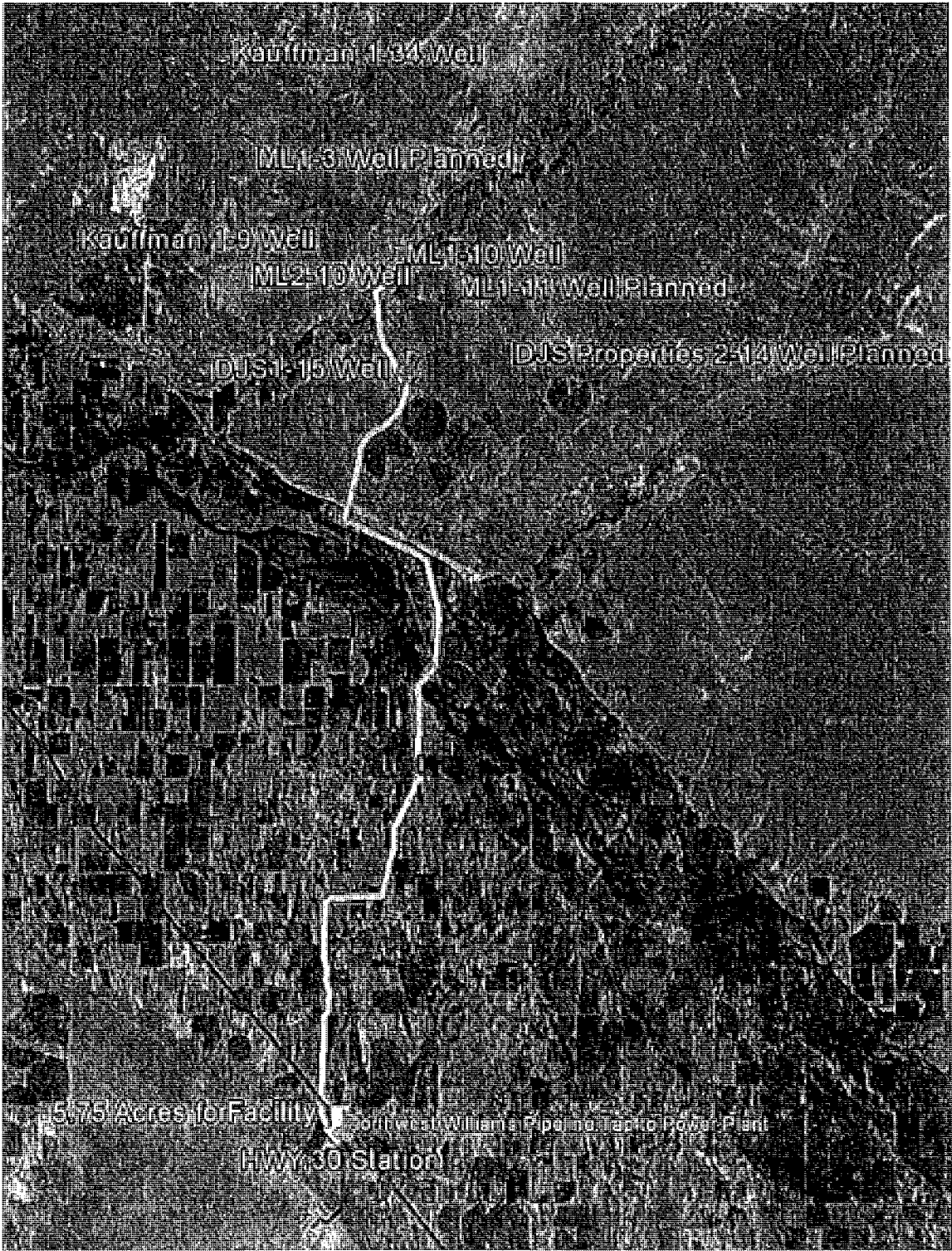
ALTA MESA SERVICES, LP,  
a Texas limited partnership  
By: Alta Mesa GP, LLC,  
Its General Partner

By:   
Name: HARLAN W. CHAPPELLE  
Title: PRESIDENT'S CEO

**EXHIBIT A**

**DEDICATED AREA**

All of production for which Operator is an operator from the Willow Hamilton Area shown on the attached map, and all production for which Operator is an operator or owner that passes through the processing facility owned by Northwest Gas Processing LLC located on the Hwy 30 Treating Facility Site shown on the attached map.



**Pipeline System Overview Map**

(Yellow = Pipeline, Blue = Northwest Pipeline)



Northern Termination of Pipeline System





Hwy 30 Treating Facility Site

(at southern termination point of pipeline system)

**SCHEDULE 1**

**CAPS AND FLOORS FOR MARKET FEES**

Oil Marketing Fee Floor: \$0.25/Barrel

Oil Marketing Fee Cap: \$1.00/Barrel

Gas Marketing Fee Floor: \$0.025/MMBtu

Gas Marketing Fee Cap: \$0.100/MMBtu

Natural Gas Liquids Marketing Fee Floor: \$0.005/Gallon

Natural Gas Liquids Marketing Fee Cap: \$0.020/Gallon

## SCHEDULE 2

### AEM PURCHASE TRANSACTIONS TERMS AND CONDITIONS

1. Governance. Subject to Section 5.3(b) of the Agreement, these AEM Purchase Transactions Terms and Conditions (these "Standard Terms") shall govern all AEM Purchase Transactions of Dedicated Area Hydrocarbons. For purposes of this Schedule 2, capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

2. Delivery, Title & Risk of Loss. Title to the Hydrocarbons and risk of loss will pass to AEM upon delivery by Operator to AEM at the Applicable Delivery Point.

3. Measurement and Analysis.

(a) Measurement. All Hydrocarbons delivered will be measured in the manner customarily utilized at the Applicable Delivery Point for the AEM Purchase Transaction in accordance with one of the alternatives listed below; provided that if more than one alternative is provided below as to a particular type of delivery, to the extent either of the Parties has the ability to control which alternative is used; the Parties agree to give effect to any below stated order of preference.

(i) On all deliveries into/out of tank cars, the quantity will be determined (in the following order of preference and based on equipment available at the point of delivery) by (A) weighing, (B) meters with no vapor return or (C) gauging of the tank cars and use of official tank car capacity tables.

(ii) On all deliveries into or out of transport and tank truck equipment, quantities will be determined (in the following order of preference and based on equipment available at the point of delivery) by: (A) weighing; (B) meter with no vapor return (or equipped to compensate for any vapor return); or (C) slip tube or rotary gauging device and applicable tank capacity tables.

(iii) On all deliveries into or out of pipelines, quantity will be determined by turbine, Coriolis, orifice or positive displacement pipeline meter in accordance with the API Manual of Petroleum Measurement Standards.

(iv) On all deliveries into or out of ships or barges, quantity will be determined (in the following order of preference and based on equipment available at the point of delivery) by: (A) gauging and official tank capacity tables or (B) if expressly specified in the Confirmation, by shore meter or shore tank measurements.

(v) All Oil will be priced on a per Barrel basis, all Gas will be priced on a per MMBtu basis, and all Natural Gas Liquids will be priced on a per Gallon basis.

(b) Sampling & Analysis. At AEM's option, excluding deliveries via pipelines, AEM may obtain a sample or samples of the Hydrocarbons from an appropriate location on the tank cars, transport, tank truck, barge or ship, as applicable, and/or the

loading/unloading facilities connected to such means of transport; at an appropriate time or times and on a frequency established by AEM; with the exact sampling locations, times and frequencies to be determined by AEM in a manner allowing the obtaining of representative samples of the Hydrocarbons being delivered pursuant to the subject AEM Purchase Transaction. If AEM elects to obtain such samples of the Hydrocarbons, AEM will be responsible for arranging for analysis of such samples, in accordance with the applicable standards, by a qualified laboratory or testing organization, all at AEM's cost, expense and risk.

(c) Standards. Measurement, sampling and analysis, pursuant to the above provisions, will be conducted in accordance with the appropriate API, ASTM or GPA standards. All such standards are incorporated herein for all purposes, including all revisions of those standards adopted and in effect during the term of the Agreement.

(d) Claims. All claims by AEM for deficiencies in quantity or quality must be made within forty-five (45) days after delivery.

(e) Quality. All Hydrocarbons delivered AEM must meet the specifications established in the Sales Proposal as modified by any changes in the Confirmation. If no Hydrocarbon specifications are so established for any such AEM Purchase Transaction, all Hydrocarbons delivered must meet the latest API specifications for the applicable Hydrocarbon, subject to Section 5.3(b) of the Agreement. If the latest API specifications do not apply to the applicable Hydrocarbon, Operator will ensure that the applicable Hydrocarbons meet generally accepted industry specifications such that the Hydrocarbons are commercially acceptable. AEM reserves the right to reject any such Hydrocarbons that do not conform to such specifications.

(f) Inspections. Each Party will be entitled to have its representatives present during all loadings, unloadings, tests and measurements involving delivery of Hydrocarbons pursuant to an AEM Purchase Transaction. Either Party may secure outside inspectors to perform gauging, sampling and testing, in which event such inspector's determinations will be conclusive and binding on the Parties. Payment for outside inspector's services will be borne by the Party requesting such services, unless some other arrangement for payment is mutually agreed.

(g) Adjustments. If, following any inspection described in Section 3(f) hereof, the meter or measurement equipment is found to be in error by more than one percent (1.0%), then the Parties agree to correct the amounts paid and owed in accordance with Section 7.3(b) of the Agreement.

#### 4. Deliveries & Receipts – Operating Procedures.

(a) If delivery of any Hydrocarbons in an AEM Purchase Transaction is to be accomplished by tank cars owned or leased by Operator, Operator will be responsible for all costs associated with such ownership or lease, including, without limitation, any lease rates associated with any leased tank car.

(b) If delivery of any Hydrocarbons in an AEM Purchase Transaction is to be accomplished by waterborne, truck or rail transport via any facility owned or operated by a Party or a Party's Affiliate ("Terminal Operator"), the other Party may be required by the Terminal

Operator to be a party to a written agreement regarding access to and operations at the applicable terminal.

(c) Operator reserves the sole right (i) to reject any rail cars, trucks, transports, pipelines, barges, vessels, containers or storage presented for loading or unloading which would present an unsafe or potentially unsafe situation, and (ii) to refuse to load/unload, transfer, or handle any Hydrocarbons under any conditions it deems unsafe which are caused by drivers, personnel, equipment, procedures, and/or weather conditions.

5. Delivery & Receipt Obligations.

(a) Failure to Take Delivery of Hydrocarbons. Should AEM fail to take delivery of Hydrocarbons at the agreed times and in the agreed quantities and such failure is not attributable to Force Majeure, Operator's sole and exclusive remedy shall be the right, but not the obligation, to elect to sell all or any portion of the volume of Hydrocarbons of which AEM failed to take timely delivery of (the "Remaining Volumes") on terms and at such prices as Operator shall determine in a commercially reasonable manner in light of the then existing circumstances and collect from AEM the difference (if any) between the price AEM agreed to pay to Operator for such Hydrocarbons (as agreed to in the AEM Purchase Transaction) plus additional costs, expenses, liabilities, penalties or fees incurred and paid by Operator arising out of, or in any way connected with, AEM's failure to timely take delivery of the Remaining Volumes, including, without limitation, any liquidated damages incurred by Operator pursuant to its obligations under an Third Party Purchase Transaction (such costs, expenses and liabilities being the "Remaining Volumes Costs") minus the sum of (i) the Net Price received by Operator from sale of such Remaining Volumes and (ii) any amounts previously paid by AEM to Operator with regard to the applicable AEM Purchase Transaction. For the purpose of this Section 5(a), "Net Price" means the gross proceeds received by Operator in connection with the sale of the Remaining Volumes. Notwithstanding anything to the contrary in the Agreement, this Schedule 2, or any Confirmation, or otherwise, no Marketing Fee will be due or paid to AEM with respect to such Remaining Volumes.

(b) Failures to Deliver. Should Operator fail to deliver Hydrocarbons at the times and in the quantities agreed to in the AEM Purchase Transaction and such failure is not attributable to Force Majeure, AEM's shall use commercially reasonable efforts to procure all or any portion of the volume of Hydrocarbons which Operator failed to timely deliver (the "Undelivered Volumes") on terms and at such prices as AEM shall determine in a commercially reasonable manner in light of the then existing circumstances and to collect from Operator the difference between the price established for such Hydrocarbons in the AEM Purchase Transaction and the Total Price (defined below) AEM pays in connection with the purchase of such Undelivered Volumes. For the purpose of this Section 5(b), "Total Price" means the gross proceeds paid by AEM in connection with the purchase of the Undelivered Volumes plus (i) all costs and expenses incurred by AEM arising out of such purchases including any additional storage and/or transportation charges, plus (ii) any additional costs, expenses, liabilities, penalties or fees incurred by AEM arising out of, or in any way connected with, Operator's failure to timely deliver the Remaining Volumes, including any liquidated damages incurred by AEM pursuant to its obligations under a Corresponding Third Party Transaction (such costs,

expenses, liabilities, penalties and fees described in clauses (i) and (ii) above being collectively the "Shortfall Damages").

(c) Imbalances. The foregoing provisions of this Section 5 are not applicable to imbalances arising under any AEM Purchase Transactions due to pipeline or other transportation imbalances or Hydrocarbon component imbalances, which are being determined, between the Parties in good faith. The intent of the Parties is that any such imbalances will be resolved on a volumetric basis as soon as practicable, but in no case later than the end of the second month following the month in which the imbalance arose. Imbalances must be resolved through delivery of volumes of Hydrocarbons only and not through monetary compensation, unless the Parties mutually agree in writing to a monetary settlement.

6. Representations and Warranties.

(a) Representations and Warranties of Each Party. On each date the Parties enter into an AEM Purchase Transaction, each Party represents and warrants to the other that: (i) it is duly authorized to enter into the AEM Purchase Transaction and to perform its obligations thereunder; (ii) the person executing the AEM Purchase Transaction is duly authorized to do so; (iii) its obligations under the AEM Purchase Transaction constitute legal, valid and binding obligations, enforceable in accordance with its terms, except as enforceability may be limited by the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally and by general principles of equity; (iv) it has entered into each AEM Purchase Transaction in connection with the conduct of its business; (v) it is an "eligible contract participant" as such term is defined in Section 1a(12) of the Commodity Exchange Act; (vi) it is a "forward contract merchant" within the meaning of the Bankruptcy Code; (vii) it is not relying upon any representations (whether written or oral) of the other Party other than the representations expressly set forth in the Agreement, including those set forth in this Section 6; (viii) its decisions with respect to each AEM Purchase Transaction have been the result of arm's length, individual negotiations between the Parties; and (ix) it is acting for its own account, as a principal only, and not as an agent, fiduciary or in any other capacity.

(b) Hydrocarbon Representations and Warranties. Operator represents and warrants to AEM as of the date of any AEM Purchase Transaction that:

(i) Operator has title to, or right to sell, the Hydrocarbons(s) delivered, free and clear of all, liens and encumbrances, and the right to deliver same, and Operator agrees to indemnify, defend and hold AEM harmless from and against any loss, claim or demand by reason of any failure of such title or breach of this warranty;

(ii) Operator shall assume liability for, and will timely pay, all taxes, fees and royalties assessed on or in connection with any production, extraction, processing, manufacture or transport of Hydrocarbons prior to or upon their delivery to the Applicable Delivery Point for all Transactions (including assuring that all severance taxes, royalties, working interest payments, and similar burdens imposed with relation to extraction and production of same are borne by Operator), and Operator agrees to indemnify, defend and hold AEM harmless from and against any loss, claim or demand by reason of any breach of this warranty; provided, however, that any personal property or similar ad valorem taxes levied or

assessed by any Governmental Authority upon ownership of the Hydrocarbons subject to any Transaction must be paid by the Party having title thereto at the time of such assessment, and if either Party is exempt from the payment of any taxes allocated to such Party under the foregoing provisions, such Party must furnish the other Party hereto proper exemption documentation; and

(iii) Hydrocarbons(s) delivered to the Applicable Delivery Point will be delivered in compliance in all material respects with all Applicable Laws, and Operator agrees to indemnify, defend and hold AEM harmless from and against any loss, claim or demand by reason of any breach of this warranty.

7. Certain Definitions. As used in this Schedule 2 and the Agreement, the following capitalized terms have the meanings set forth below:

“API” means American Petroleum Institute.

“ASTM” means American Society for Testing and Materials.

“Barrel” means forty-two Gallons.

“Btu” means the amount of heat energy needed to raise the temperature of one pound of water from 58.5 degrees Fahrenheit to 59.5 degrees Fahrenheit at a constant pressure of 14.73 pounds per square inch absolute.

“Gallon” means a U.S. Gallon of 231 cubic inches of liquid corrected for temperature to 60 degrees Fahrenheit and at the equilibrium vapor pressure of the liquid.

“Gas” means any mixture of gaseous hydrocarbons, or of hydrocarbons and other gases, in a gaseous state, consisting primarily of methane, including casinghead gas produced with crude oil, gas from gas wells produced in association with crude oil (associated gas), gas from condensate wells (non-associated gas), Components, and shall include any inerts or impurities contained therein.

“GPA” means the Gas Processors Association of the United States.

“MCF” means one thousand cubic feet of Gas at a temperature base of 60 degrees Fahrenheit and a pressure base of 14.73 pounds per square inch absolute.

“MMBtu” means one million Btus, which is equivalent to one dekatherm.

“Natural Gas Liquids” means the mixture of liquid hydrocarbons obtained by the processing of Gas, other than Conventionally Separated Liquids, including Propane.

“Oil” means petroleum oil and other hydrocarbons regardless of gravity that are produced at the wellhead in liquid form, including Conventionally Separated Liquids.

“Propane” shall mean HD-5 Propane.

### SCHEDULE 3

#### TRANSLOADING FEE

For purposes of determining AEM Transportation Costs, AEM shall be entitled to include a transloading fee (the "Transloading Fee") with respect to Dedicated Area Hydrocarbons (the "Transloaded Product") purchased by AEM from Operator in AEM Purchase Transactions, which Dedicated Area Hydrocarbons are transloaded or are otherwise delivered and sold without transloading in a manner approved in advance by Operator, determined in accordance with the following:

1. Definition. As used in this Schedule 3 and the Agreement, "Phase I Capacity" means a maximum capacity of at least 2,040 Barrels per day of stabilized condensate and 1,800 Barrels per day of Natural Gas Liquids.

2. Transloading Fees.

(a) With respect to the first 500,000 Barrels of Transloaded Product, \$4.25 for each Barrel of Transloaded Product.

(b) With respect to Transloaded Product after the first 500,000 Barrel, \$3.00 for each Barrel of Transloaded Product.

Provided that, if for any reason AEM is unable to transload (or arrange for delivery to market in a manner approved in advance by Producer, which approval shall not be unreasonably withheld or delayed) all or any part of the volume of Product scheduled by Producer for such transloading or delivery ("Excess Volumes"), then the Producer may arrange for transloading or delivery of such Excess Volumes and Producer will not pay a Transloading Fee with respect to such Excess Volumes.





ACCOUNTING INFORMATION		
ARM Energy Management, LLC 20329 State Highway 24, Suite 450 Houston, TX 77070 ATTN: Credit Department I TEL#: 281-644-3200 FAX#: 281-664-0029 EMAIL: rmanvar@asset-risk.com	<i>INVOICES            PAYMENTS            SETTLEMENTS</i>	Alta Mesa Services, LP 15021 Katy Freeway, Suite 400 Houston, Texas 77094 ATTN: Revenue Accounting TEL#: (281) 530-0991 FAX#: (281) 530-5278 EMAIL: n/a
BANK: Bank of America CITY: Austin, Texas ABA: Wire ABA:026009593/ACH ABA:111006025 ACCT: 488040282099 Reference: ARM Energy Management	<i>WIRE TRANSFER            NUMBERS</i>	BANK: Amegy Bank of Texas CITY: Houston, Texas ABA: 113011258 ACCT: 53480844 Reference: Alta Mesa Services, LP – REVENUE ACCOUNT

## ANNEX II

### INSURANCE

- A. Statutory Workers' Compensation Insurance and Employer's Liability including maritime endorsement, if applicable, in accordance with the laws of the state, parish province or territory where Services are performed and each Applicable Delivery Point is located, in the amount of \$1,000,000 per occurrence and in the aggregate.
- B. Commercial General Liability Insurance providing for third party property damage and personal injury, including broad form contractual liability for any agreement, broad form property damage and *in rem* actions, and sudden and accidental pollution in the amount of \$1,000,000 per occurrence and in the aggregate.
- C. Full Form Protection and Indemnity Insurance, if applicable, in the amount of \$1,000,000 per occurrence and in the aggregate.
- D. Excess Liability Insurance providing coverage inclusive of the foregoing insurances, excluding statutory insurance coverage, in the amount of \$10,000,000 per occurrence and in the aggregate.
- E. Automobile Liability Insurance covering all owned, hired and non-owned vehicles with a minimum combined single limit for bodily injury and property damage liability of \$1,000,000 per accident or occurrence.

Each Party agrees that, to the extent it assumes liability herein, it shall endorse the above insurance to name the indemnified Parties as additional insureds (except for Workers Compensation), shall waive its right of subrogation against, in the case of AEM, the Operator Indemnified Parties and, in the case of Operator, the AEM Indemnified Parties and their insurers, and agrees that its insurance shall be primary to that carried by the indemnified Parties.

**AMENDMENT TO THE  
MARKETING SERVICES AGREEMENT**

THIS AMENDMENT TO THE MARKETING SERVICES AGREEMENT (this "Amendment"), dated as of the 15<sup>th</sup> day of January, 2016, is entered into by and between ARM Energy Management LLC, a Delaware limited liability company (the "Company"), and Alta Mesa Services, LP, a Texas limited partnership (the "Operator").

**RECITALS**

A. The Company and the Operator entered into that certain Marketing Services Agreement, dated as of January 8, 2015 (the "Agreement"), pursuant to which the Operator appointed the Company to act as the Operator's sole and exclusive representative for all purposes with regards to negotiating and entering into agreements for the ultimate sale of Dedicated Area Hydrocarbons.

B. The Parties now desire to amend the Agreement as provided herein.

NOW, THEREFORE, in consideration of the covenants made hereunder, and other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. Definitions. Capitalized terms used but not otherwise defined herein shall have the meanings set forth in the Agreement.

2. Amend Schedule 3.

(a) Section 2(a). Section 2(a) of Schedule 3 (Transloading Fee) is hereby amended by deleting the amount "\$4.25" and replacing it with "\$4.39".

(b) Section 2(b). Section 2(b) of Schedule 3 (Transloading Fee) is hereby amended by deleting the amount "\$3.00" and replacing it with "\$3.14".

(c) Section 2(c). Schedule 3 (Transloading Fee) is hereby amended by adding the following as Section 2(c):

(c) In addition to the amounts payable pursuant to Section 2(a) and 2(b) above, if a carrier's time to load the Product at Little Willow (as defined below) or the Treating Facility (as defined below) results in demurrage charges, the amount of any such demurrage charges not to exceed (i) the rate of \$100 per hour (or the applicable proportionate rate for any incremental portion of an hour) of demurrage and (ii) a maximum demurrage for any single haul of \$200. For purposes of this Section 2(c), (x) "Little Willow" means the site for loading Product located at 4647 Little Willow Rd., New Plymouth, Idaho, and (y) "Treating Facility" means that certain processing facility owned by Northwest Gas Processing LLC and known as the "Hwy 30 Treating Facility".

3. Effective Date. The parties hereby agree that the effective date of this Amendment shall be December 1, 2015.

4. Incorporation. The terms of Agreement (as modified hereby) are hereby incorporated herein by this reference.

5. Agreement Affirmed. As modified hereby, the Agreement is hereby affirmed and deemed to continue in full force and effect.

6. Counterparts. This Amendment may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, constitute one and the same document. The signature of any Party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. This Amendment may be executed and delivered by facsimile, or by email in portable document format (.pdf) and delivery of the executed signature page by such method will be deemed to have the same effect as if the original signature had been delivered to other the Party.

7. Representative Capacity. If executing this Amendment in a representative or fiduciary capacity, the undersigned represents and warrants (a) on behalf of the person, partnership, trust, estate, corporation, or other entity for whom the undersigned is acting in this matter, that such person, partnership, trust, estate, corporation or other entity has full right and power to execute, deliver, and perform this Amendment, and (b) that the undersigned has been duly authorized and directed to execute and deliver this Amendment for and on behalf of the person, partnership, trust, estate, corporation, or other entity for whom the undersigned is acting in this matter.

8. Governing Law. This Amendment shall be governed by, and construed in accordance with, the law of the State of Texas without giving effect to any choice of law rule that would cause the application of the laws of any jurisdiction other than the internal laws of the State of Texas.

[SIGNATURES TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to the Marketing Services Agreement to be executed as of the date first above written.

**"COMPANY"**

ARM ENERGY MANAGEMENT LLC,  
a Delaware limited liability company

By: 


Name: Taylor T. Tipton

Title: President

**"OPERATOR"**

ALTA MESA SERVICES, LP,  
a Texas limited partnership

By: Alta Mesa GP, LLC  
Its General Partner

By:   
Name: Michael A. McCabe  
Title: Chief Financial Officer

MAP

SIGNATURE PAGE  
TO  
AMENDMENT TO THE  
MARKETING SERVICES AGREEMENT