

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM401635

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
Titan Energy Operating, LLC		09/01/2016	Limited Liability Company: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	Wells Fargo Bank, National Association		
<b>Street Address:</b>	1525 W WT Harris Blvd		
<b>Internal Address:</b>	1st Floor		
<b>City:</b>	Charlotte		
<b>State/Country:</b>	NORTH CAROLINA		
<b>Postal Code:</b>	28262		
<b>Entity Type:</b>	National Association: UNITED STATES		
<b>PROPERTY NUMBERS Total: 2</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	4065556	ATLAS RESOURCES	
<b>Registration Number:</b>	4216364	ATLAS RESOURCES	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	2024083141		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Phone:</b>	2024083141		
<b>Email:</b>	jean.paterson@cscglobal.com		
<b>Correspondent Name:</b>	Corporation Service Company		
<b>Address Line 1:</b>	1090 Vermont Avenue, NW		
<b>Address Line 4:</b>	Washington, D.C. 20005		
<b>NAME OF SUBMITTER:</b>	Jean Paterson		
<b>SIGNATURE:</b>	/jep/		
<b>DATE SIGNED:</b>	10/12/2016		
<b>Total Attachments: 7</b>			
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of September 1, 2016 between Titan Energy Operating, LLC (the “Grantor”), and Wells Fargo Bank, National Association, as Administrative Agent for the Secured Creditors (in such capacity, the “Administrative Agent”).

## RECITALS

- (A) Titan Energy, LLC, a Delaware limited liability company (the “Parent”), Grantor, the financial institutions party thereto as lenders (each individually referred to as a “Lender” and collectively as “Lenders”) and the Administrative Agent are parties to a Third Amended and Restated Credit Agreement dated as of September 1, 2016 (as amended, restated, supplemented or otherwise modified from time to time in accordance with its terms, the “Credit Agreement”).
- (B) Grantor is party to a Third Amended and Restated Security Agreement, dated as of September 1, 2016, in favor of the Administrative Agent (as it may from time to time be amended, restated, supplemented or otherwise modified in accordance with its terms, the “Security Agreement”), pursuant to which the Grantor is required to execute and deliver this Agreement.
- (C) In consideration of the conditions and agreements set forth in the Credit Agreement, the Security Agreement and this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

**Section 1 Defined Terms**

Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

**Section 2 Grant of Security Interest in Intellectual Property Collateral**

As security for the prompt and complete payment and performance in full when due (whether at stated maturity, by acceleration or otherwise) of all Secured Obligations, the Grantor hereby pledges, assigns, transfers and grants to the Administrative Agent, for its benefit and for the benefit of the Secured Creditors, a continuing security interest in and Lien on all of its right, title and interest in, to and under all Intellectual Property Collateral (as defined below), whether now owned or hereafter acquired or existing and wherever located.

“Intellectual Property Collateral” means the Grantor’s right, title and interest in, to and under all of the following property (other than any Excluded Property):

- (a) all copyrights owned by or licensed to the Grantor, including those referred to on Schedule I hereto;
- (b) all patents owned by or licensed to the Grantor, including those referred to on Schedule II hereto;

- (c) all trademarks owned by or licensed to the Grantor, including those referred to on Schedule III hereto, together with all goodwill of the business connected with the use of, and symbolized by, each such trademark;
- (d) all written agreements to which the Grantor is a party providing for the granting of any right in or to any Intellectual Property (whether the Grantor is licensee or licensor thereunder), and all renewals and extensions thereof;
- (e) all reissues, continuations or extensions of the foregoing; and
- (f) all Proceeds of the foregoing, including any claim by Grantor against third parties for past, present or future (i) infringement or, if applicable, dilution of any owned or licensed copyright, trademark or patent, or (ii) injury to the goodwill associated with any owned or licensed trademark.

### **Section 3 Certain Exclusions**

Notwithstanding anything herein to the contrary, in no event will the Intellectual Property Collateral include and the Grantor will not be deemed to have granted a Security Interest in any of its right, title or interest in any Excluded Property.

### **Section 4 Security Agreement**

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Administrative Agent pursuant to the Security Agreement, and the Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent with respect to the security interest granted by them in the Intellectual Property Collateral made and granted hereby are more fully set forth in the Security Agreement. To the extent applicable for purposes of this Agreement, the terms and provisions of the Security Agreement are incorporated by reference herein. To the extent there is any conflict between the terms of this Agreement and the Security Agreement, the Security Agreement shall control.

### **Section 5 Governing Law**

**THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER ARE GOVERNED BY, AND WILL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK).**

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Grantor has caused this Intellectual Property Security Agreement to be duly executed and delivered by their respective officers or representatives thereunto duly authorized as of the date first written above.

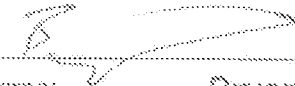
**TITAN ENERGY OPERATING, LLC,**

as Grantor

By:   
Name: **Jeffrey Slotterback**  
Title: **Chief Financial Officer**

ACCEPTED AND AGREED:

WELLS FARGO BANK, NATIONAL ASSOCIATION,  
as Administrative Agent

By:   
Name: Bryan McDavid  
Title: Director

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

**TRADEMARK**  
**REEL: 005897 FRAME: 0791**

**SCHEDULE I TO THE INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**COPYRIGHT REGISTRATIONS**

**Copyrights**

None

**SCHEDULE II TO THE INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**PATENT REGISTRATIONS**

**Patents**

None



**SCHEDULE III TO THE INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**TRADEMARK REGISTRATIONS**

**Trademarks**

<b>Mark</b>	<b>Registration No.</b>	<b>Reg. Date</b>
ATLAS RESOURCES	4,065,556	December 6, 2011
ATLAS RESOURCES	4,216,364	October 2, 2012