CONFIDENTIAL

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

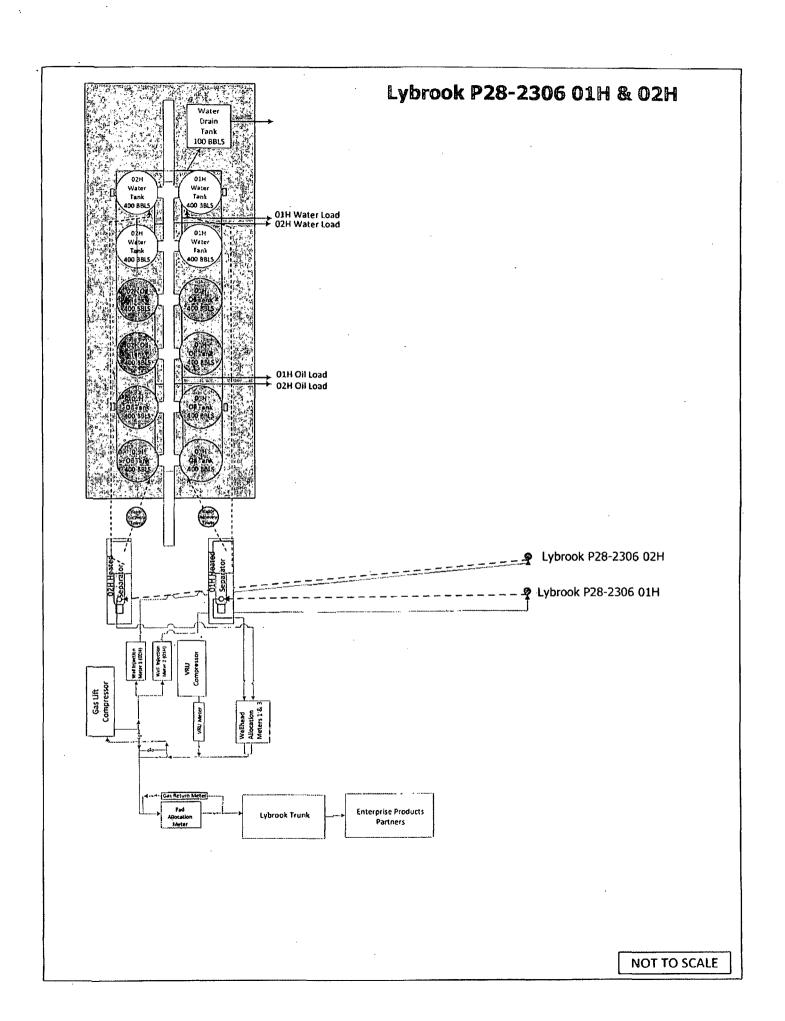
FORM APPROVED

	OMB No. 1004-0137
	Expires: July 31, 2010
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NMNM 1112953 NMNM 109386
6. If Indian, Allottee or Tribe Name
N/A
N/A

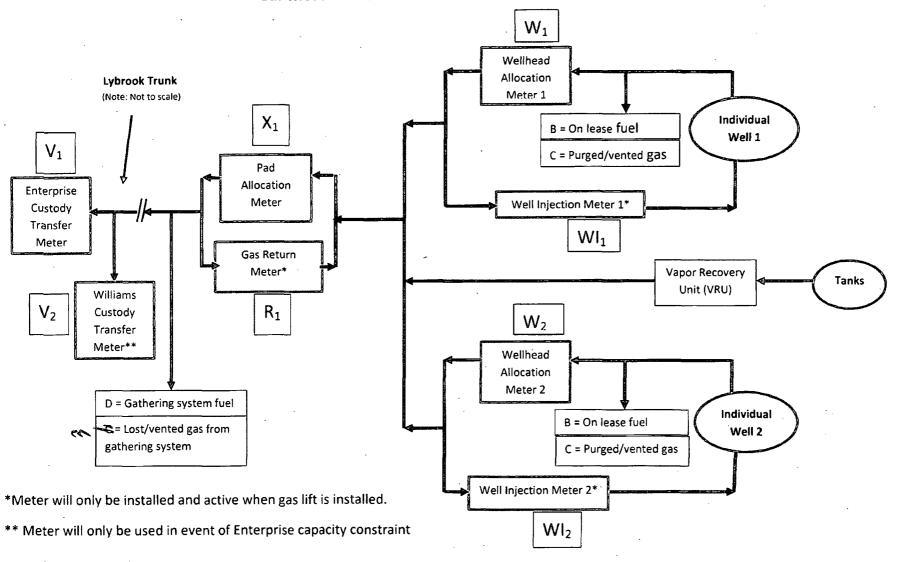
Do not use this t	IOTICES AND REPORTS ON form for proposals to drill or Use Form 3160-3 (APD) for s	6. If Indian, Allottee or Tribe Name N/A				
SUBMIT IN TRIPLICATE - Other instructions on page 2.			7. If Unit of CA/Agreement, Name and/or No.			
I. Type of Well Oil Well Gas W	/ell Other	JUL 24 2014	8. Well Name and No. Lybrook P28-2306 01	Н		
2. Name of Operator Encana Oil & Gas (USA) Inc.		9. API Well No. 30-043-21176				
3a. Address 3b. Phone No (include area code) 370 17th Street, Suite 1700 Denver, CO 80202 720-876-5867			10. Field and Pool or Ex Lybrook Gallup	ploratory Area		
4. Location of Woll (Footage, Sec., T., SHL: 336' FSL and 1280' FEL Sec 28, T23N, R's BHL: 2372'FNL and 1610' FEL Sec 4, T22N, R6	R.,M., or Survey Description) w W	11. Country or Parish, State Sandoval, New Mexico				
12. CHEC	CK THE APPROPRIATE BOX(ES) TO IN	NDICATE NATURE OF NOTIC	CE, REPORT OR OTHER	RDATA		
TYPE OF SUBMISSION	TYPE OF ACTION					
✓ Notice of Intent ☐ Subsequent Report	Alter Casing Fr	acture Treat Recla	uction (Start/Resume) amation amplete porarily Abandon	Water Shut-Off Well Integrity ✓ Other Installation of Gas Lift		
Final Abandonment Notice	Convert to Injection Plo	ug Back Wate	r Disposal			
following completion of the involve testing has been completed. Final determined that the site is ready fo	vork will be performed or provide the Borved operations. If the operation results in a Abandonment Notices must be filed only r final inspection.) uesting authorization to install gas lift a	a multiple completion or recomp after all requirements, including	eletion in a new interval, a reclamation, have been of well. Attached is a school	Form 3160-4 must be filed once ompleted and the operator has		
		nd in statical		· ·		
14. Thereby certify that the foregoing is Name (Printed/Typed) Cristi Bauer	rue and correct.	Title Operations Techno	logist			
Signature CR184	· BAUTER	Date 7/2	3/14			
	THIS SPACE FOR FEI	DERAL OR STATE OF	FICE USE			
that the applicant holds legal of equitable entitle the applicant to conduct operations. Title 18 U.S.C. Section 1001 and Title 43	ed. Approval of this notice does not warrant title to those rights in the subject lease which thereon. 3 U.S.C. Section 1212, make it a crime for an resentations as to any matter within its jurisdi	y person knowingly and willfully	to make to any department			
memous or maddurent statements of repr	esemanons as to any matter within its furisur	eucii.				

(Instructions on page 2)



Attachment No. 5
Encana Oil & Gas (USA) Inc.
Lybrook Trunk Line #1, Gathering System
San Juan County, New Mexico
Amendment Dated May 15, 2014

Gas Measurement Allocation Procedure for Multi-Well Pads



Attachment No. 5 Encana Oil & Gas (USA) Inc. Lybrook Trunk Line #1, Gathering System San Juan County, New Mexico Amendment Dated May 15, 2014

Base Data:

V₁ = Gas Volume (MCF) from Custody Transfer Meter during allocation period (Enterprise)

V₂ = Gas Volume (MCF) from Custody Transfer Meter during allocation period (Williams)

X_x = Gas Volume (MCF) from Pad Allocation Meter during allocation period. (Encana)

R_v = Gas Volume (MCF) from Gas Return Meter at Well Pad (Encana)*

 $(X_x - R_x) = Gas Volume (MCF)$ for total Well Pad Production (Encana)

 W_x = Gas Volume (MCF) from Wellhead Allocation Meter at individual wells during allocation period. (Encana)

WI_x = Gas Volume (MCF) from Well Injection Meter at individual wells during allocation period. (Encana)*

Y₁ = Heating Value (BTU/scf) from Custody Transfer Meter during allocation period. (Enterprise)

Y₂ = Heating Value (BTU/scf) from Custody Transfer Meter during allocation period. (Williams)

Z = Heating Value (BTU/scf) from individual Wellhead Allocation Meter and Well Injection Meter. (Encana)

Allocation Period is typically a calendar month and will be the same for all Well Pads and individual wells.

Well Pad Gas Production = A + B + C + D + E

A = Allocated Gas production off lease for Well Pad, MCF: $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]*(V_1+V_2)$

Please note, gas production (MCF) for individual wells on a Well Pad is calculated using the formula: $[(W_1-WI_1)/((W_1-WI_1)+(W_2-WI_2)+(W_n-WI_n))]^*(X_1-R_1)$

B = On lease fuel usage, MCF. Determined from equipment specification and operating conditions. This includes, but is not limited to, compression, vapor recovery unit (VRU) compression, burners, and pump jacks.

C = Lost and/or vented gas from well and/or lease equipment, MCF. Calculated using equipment and piping specifications and operating pressures.

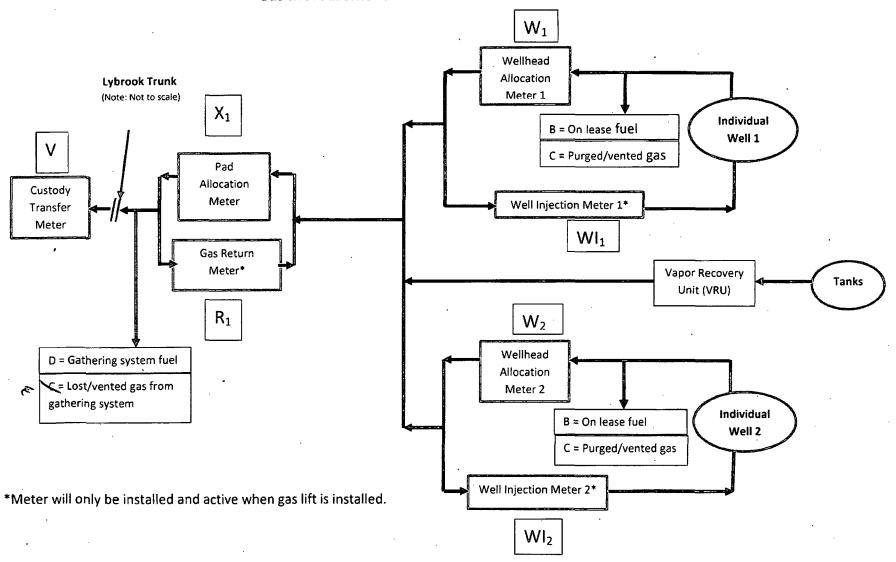
Attachment No. 5
Encana Oil & Gas (USA) Inc.
Lybrook Trunk Line #1, Gathering System
San Juan County, New Mexico
Amendment Dated May 15, 2014

D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the Well Pads benefiting from the equipment using allocation factors determined by $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]$ and for individual wells using allocation factors determined by $[(W_1-W_1)/((W_1-W_1)+(W_2-W_1)+(W_n-W_1))]$.

E = Allocated volume of gas lost and/or vented from the gathering system, gathering system equipment, condensate collection, and water collection in MCF. The total volume will be determined using industry accepted procedures the time of the loss. The total volumes lost and/or vented will be allocated to the Well Pads affected using factors determined by $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_0))]$, and for individual wells using factors determined by $[(W_1-W_1)/((W_1-W_1)+(W_2-W_1))]$.

Individual Well BTU's = $[[{(W_n-WI_n)*Z_n}/{SUM((W_n-WI_n)*Z_n)}]*(V_1*Y_1+V_2*Y_2)*1000]$ Individual well gas heating values to be determined in accordance with BLM regulations. Attachment No. 5 Encana Oil & Gas (USA) Inc. Lybrook Trunk Line #1, Gathering System Sandoval County, New Mexico Amendment Dated May 15, 2014

Gas Measurement Allocation Procedure for Multi-Well Pads



Attachment No. 5 Encana Oil & Gas (USA) Inc. Lybrook Trunk Line #1, Gathering System Sandoval County, New Mexico Amendment Dated May 15, 2014

Base Data:

V = Gas Volume (MCF) from Custody Transfer Meter during allocation period (Enterprise Products Partners)

 X_x = Gas Volume (MCF) from Pad Allocation Meter during allocation period. (Encana)

R_v = Gas Volume (MCF) from Gas Return Meter at Well Pad (Encana)*

 $(X_x - R_x) = Gas Volume (MCF)$ for total Well Pad Production (Encana)

 W_x = Gas Volume (MCF) from Wellhead Allocation Meter at individual wells during allocation period. (Encana)

WI_x = Gas Volume (MCF) from Well Injection Meter at individual wells during allocation period. (Encana)*

Y = Heating Value (BTU/scf) from Custody Transfer Meter during allocation period. (Enterprise Products Partners)

Z = Heating Value (BTU/scf) from individual Wellhead Allocation Meter and Well Injection Meter. (Encana)

Allocation Period is typically a calendar month and will be the same for all Well Pads and individual wells.

Well Pad Gas Production = A + B + C + D + E

A = Allocated Gas production off lease for Well Pad, MCF: $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]*(V)$

Please note, gas production (MCF) for individual wells on a Well Pad is calculated using the formula: $[(W_1-WI_1)/((W_1-WI_1)+(W_2-WI_2)+(W_n-WI_n))]*(X_1-R_1)$

B = On lease fuel usage, MCF. Determined from equipment specification and operating conditions. This includes, but is not limited to, compression, vapor recovery unit (VRU) compression, burners, and pump jacks.

C = Lost and/or vented gas from well and/or lease equipment, MCF. Calculated using equipment and piping specifications and operating pressures.

D = Allocated fuel from gathering system equipment, MCF. The total fuel required to operate gathering system equipment will be allocated to the Well Pads benefiting from the equipment using allocation factors determined by $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]$ and for individual wells using allocation factors determined by $[(W_1-W_1)/((W_1-W_1)+(W_2-W_1)+(W_n-W_1))]$.

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E = Allocated volume of gas lost and/or vented from the gathering system, gathering system equipment, condensate collection, and water collection in MCF. The total volume will be determined using industry accepted procedures the time of the loss. The total volumes lost and/or vented will be allocated to the Well Pads affected using factors determined by $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]$, and for individual wells using factors determined by $[(W_1-WI_1)/((W_1-WI_1)+(W_2-WI_2)+(W_n-WI_n))]$.

Individual Well BTU's = $[[{(W_n-WI_n)*Z_n}/{SUM((W_n-WI_n)*Z_n)}]*(V*Y)*1000]$ Individual well gas heating values to be determined in accordance with BLM regulations.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington Field Office 6252 College Blvd., Suite A Farmington, New Mexico 87402

IN REPLY REFER TO:

CONDITIONS OF APPROVAL FOR GAS LIFT & BUY BACK METER INSTALLATIONS:

• The buy-back meter isolation valve, either up or down stream of the buy-back meter must be effectively sealed in the closed position to prevent produced gas from potentially by-passing the measurement and sales meter. In lieu of the seal requirement at least two check valves can be installed in line with the buy-back meter to prevent produced gas from potentially by-passing the measurement and sales meter.

Contact this office so a BLM witness verify installation of either the seal or check valves.

- If seals are installed, seal records must be maintained and made available upon request.
 - Post a Facility sign that Clearly identifies <u>both</u> the sales and byback meters.