Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM-048989A
	6. If Indian, Allottee or Tribe Name N/A
	7. If Unit of CA/Agreement, Name and/or No. N/A
	8. Well Name and No. Lybrook M35-2308 01H
2. Name of Operator Encana Oil & Gas (USA) Inc.	9. API Well No. 30-045-35526
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202 3b. Phone No. *(include area code)* 720-876-5867	10. Field and Pool or Exploratory Area Alamito-Gallup Pool
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SHL: 316' FSL and 1298' FWL Sec 35, T23N, R8W BHL: 330' FSL and 920' FWL Sec 2, T22N, R8W	11. County or Parish, State San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Pre-Installation of Gas Lift
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. is requesting authorization to install gas lift at the Lybrook M35-2308 01H well. Attached is a schematic of the pad with gas lift and the gas allocation procedure.

OIL CONS. DIV DIST. 3

OCT 29 2014

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* Cristi Bauer	Title Operations Technician
Signature Cristi Bauer	Date 10/15/14

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title Petr. Eng	Date 10/21/14
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD

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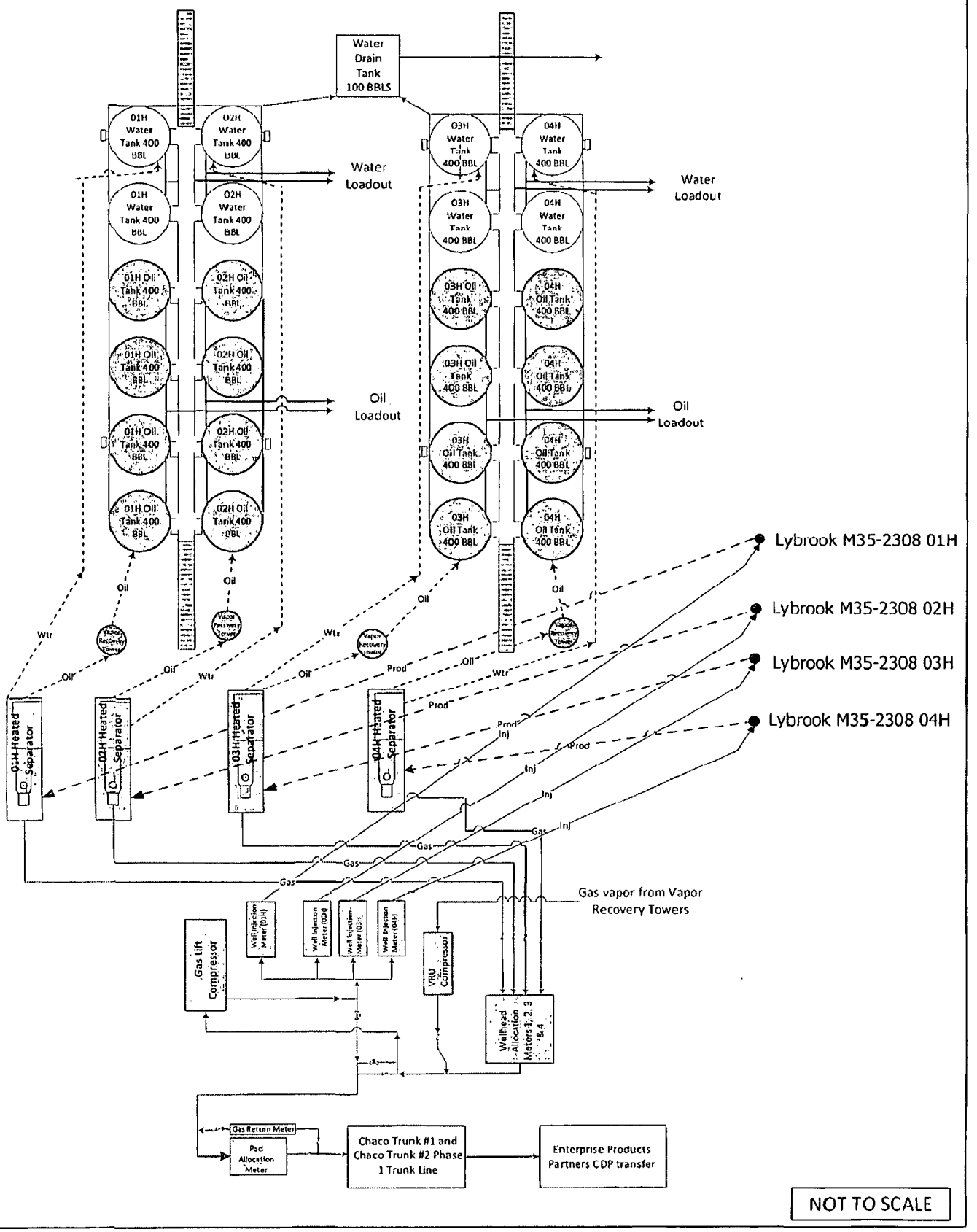
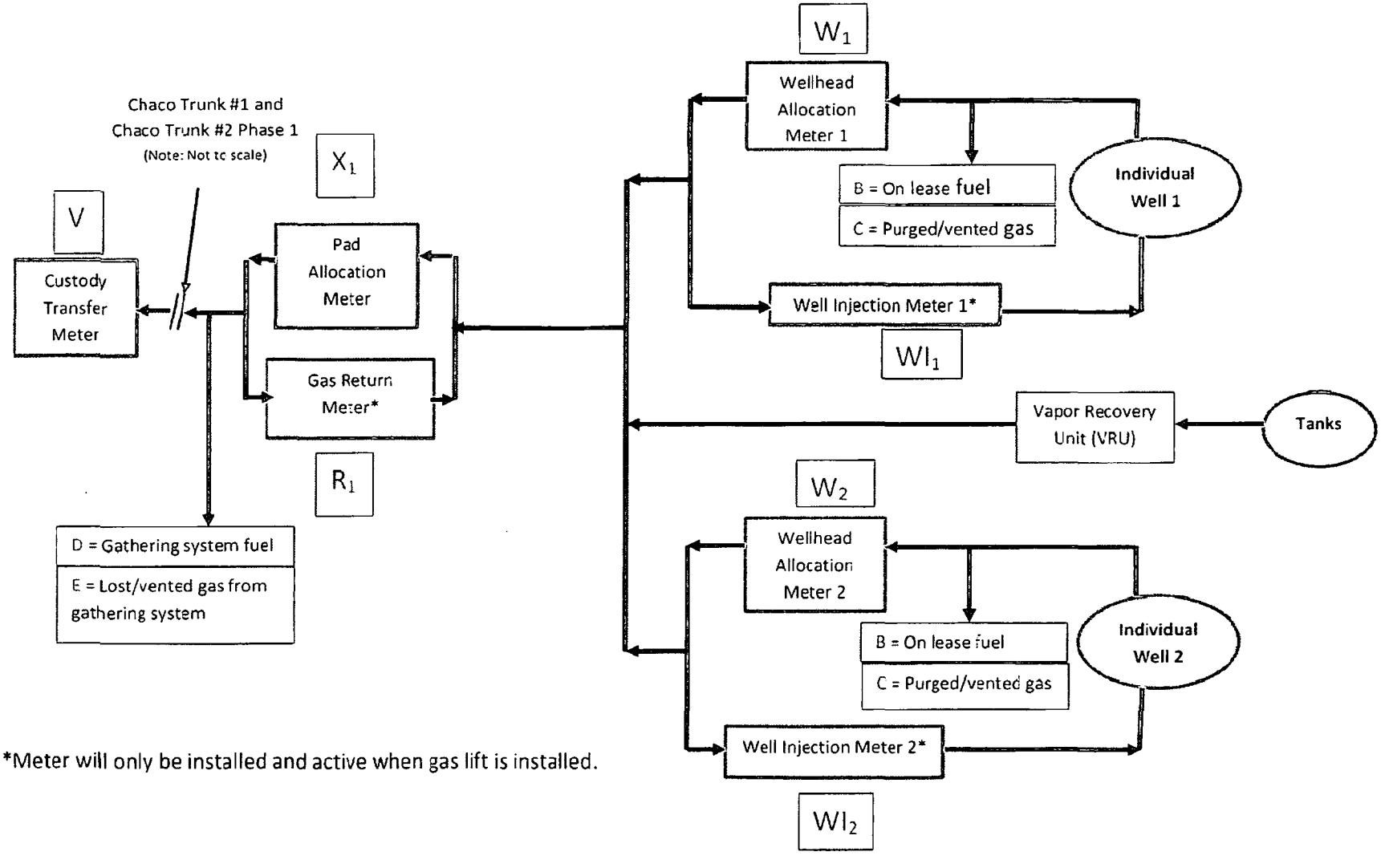
Lybrook M35 2308 01H, 02H, 03H & 04H



Attachment No. 5
Encana Oil & Gas (USA) Inc.
Chaco Trunk #1 and Chaco Trunk #2 Phase 1 Gathering System
San Juan and Sandoval Counties, New Mexico

Gas Measurement Allocation Procedure for Multi-Well Pads



*Meter will only be installed and active when gas lift is installed.

Attachment No. 5
Encana Oil & Gas (USA) Inc.
Chaco Trunk #1 and Chaco Trunk #2 Phase 1 Gathering System
San Juan and Sandoval Counties, New Mexico

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_x = 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.

Allocate the off lease Custody Transfer volume back to the well pad

A_{AL} = Well pad allocated volume (MCF) = $[(X_1-R_1)/((X_1-R_1)+(X_2-R_2)+(X_n-R_n))]*(V) + D + E$

Distribute (allocate) the allocated well pad production, (A_{AL}) back to each well on the pad

Gas production (MCF) allocated back to the individual wells on a Well Pad is calculated using the formula:
AL $Net_n = [(W_1-WI_1)/((W_1-WI_1)+(W_2-WI_2)+(W_n-WI_n))]* A_{AL}$

Determine the final allocated production for each well on the pad

Final allocated individual well production (MCF) = AL $Net_n + B_n + C_n$

B_n = On lease fuel usage attributed to an individual well, 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_n = Lost and/or vented gas attributed to an individual well 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 $[(W_1-WI_1)/((W_1-WI_1)+(W_2-WI_2)+(W_n-WI_n))]$.

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 either up and down stream of the buyback meter or 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 Card or Sign that Clearly identifies <u>both</u> the sales and by-back meters.**
  - **Gas Meters must be installed and calibrated in accordance with Onshore Order 5.**