

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 28 2017

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.

Farmington Field Office
Bureau of Land Management

5. Lease Serial No.
NMMN 12374

6. If Indian, Allottee or Tribe Name
N/A

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit of CA/Agreement, Name and/or No. NMMN 132981A
2. Name of Operator Encana Oil & Gas (USA) Inc.		8. Well Name and No. Nageezi Unit 221H
3a. Address 370 17th Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 720-876-5331	9. API Well No. 30-045-35820
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 2428' FSL and 346' FWL Section 27, T24N, R9W BHL: 2070' FSL and 180' FWL Section 35, T24N, R9W		10. Field and Pool or Exploratory Area Nageezi Unit; Mancos (OIL)
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Installation of Gas Lift
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 Nageezi Unit 221H well. Attached is the proposed well site schematic of the pad with gas lift as well as the gas allocation procedure.

OIL CONS. DIV DIST. 3
MAR 3 2017

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Katie Wegner

Title Senior Regulatory Analyst

Signature *Katie Wegner*

Date 02/27/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *William Tambekou*

Title *Petroleum Engineer* Date *3/2/2017*

Office *FFD*

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.

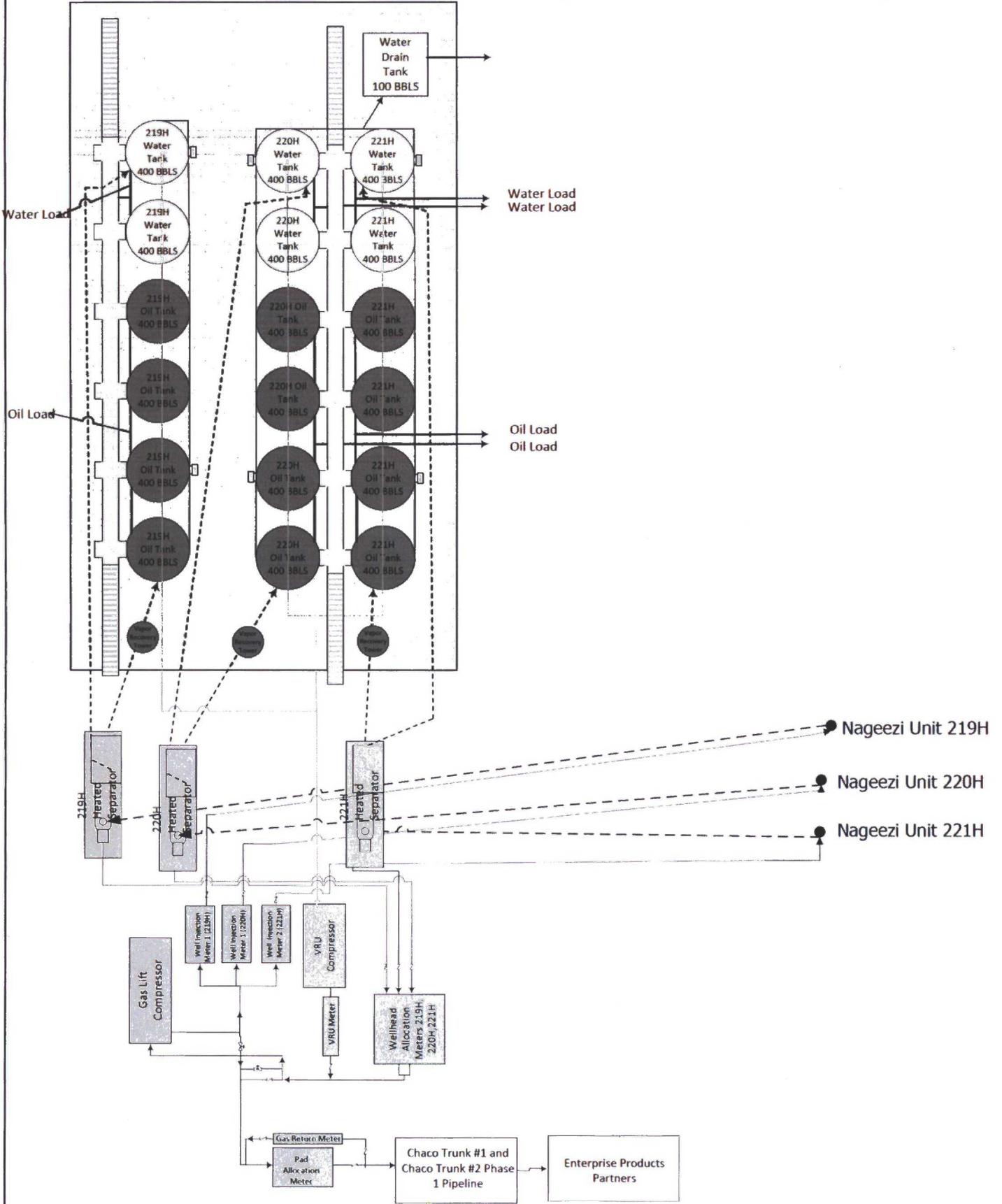
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCDAV

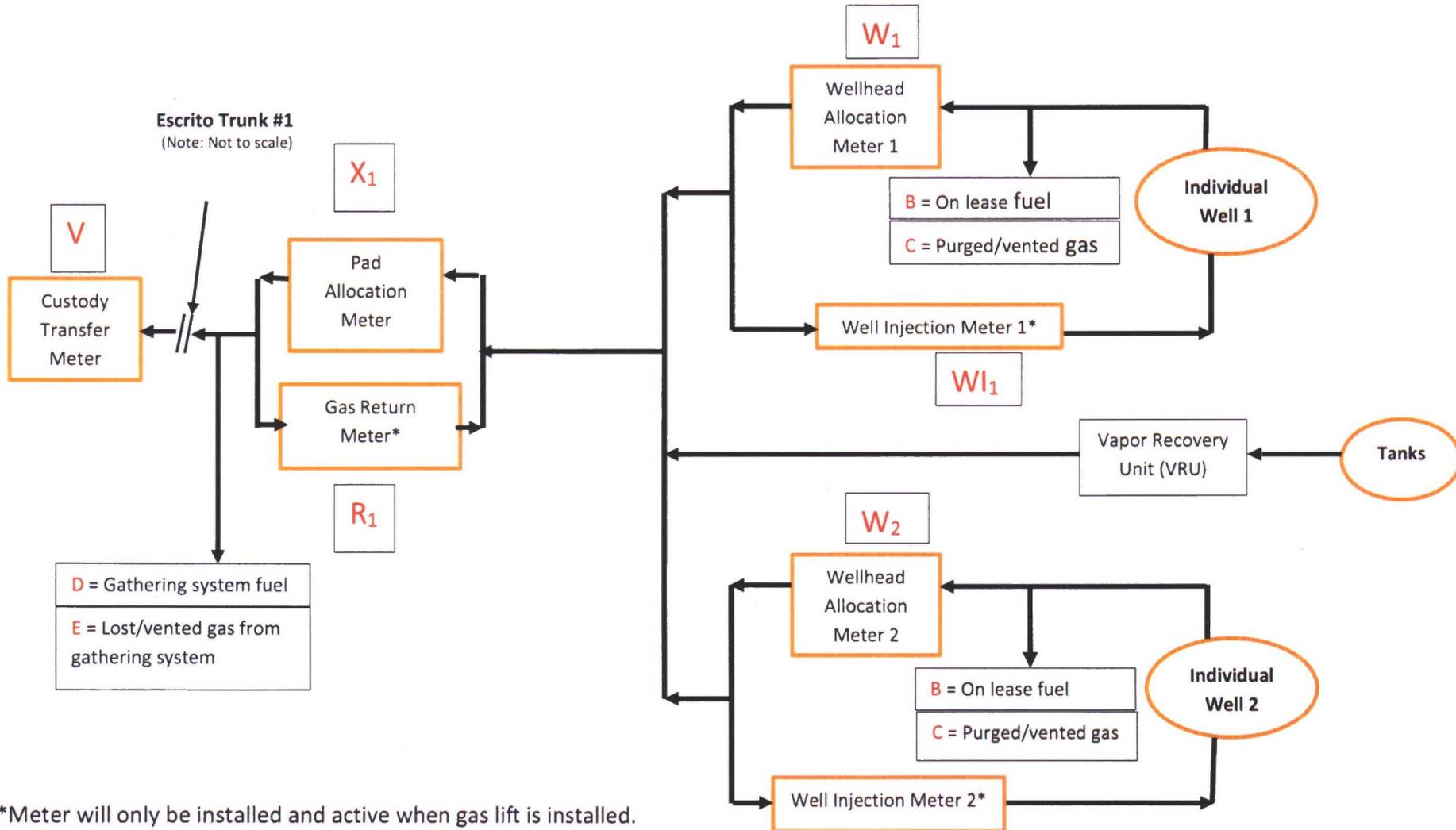
5

Nageezi Unit 219H, 220H, 221H



NOT TO SCALE

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.
Escrito Trunk #1 Gathering System
San Juan County, New Mexico

WI₂

Base Data:

V = Gas Volume (MCF) from Custody Transfer Meter during allocation period (Enterprise Field Services, LLC)

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 Field Services, LLC)

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

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

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:

$$AL \text{ Net}_n = [(W_1 - WI_1) / ((W_1 - WI_1) + (W_2 - WI_2) + \dots + (W_n - WI_n))] * A_{AL}$$

Determine the final allocated production for each well on the pad

$$\text{Final allocated individual well production (MCF)} = AL \text{ Net}_n + B_n + C_n$$

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.

Attachment No. 5
Encana Oil & Gas (USA) Inc.
Escrito Trunk #1 Gathering System
San Juan County, New Mexico

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.