

RECEIVED

Form 3160-5  
(February 2005)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

DEC 23 2013

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.**

5. Lease Serial No.  
NMSF-078360

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
Chaco 2306-19M #191H

9. API Well No.  
30-043-21139

10. Field and Pool or Exploratory Area  
Lybrook Gallup

11. Country or Parish, State  
Sandoval County, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
WPX Energy Production, LLC

3a. Address  
PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)  
505-333-1822

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SHL: 1236' FSL & 287' FWL SEC 19 23N 6W  
BHL: 382' FSL & 342' FWL SEC 24 23N 7W

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 <u>Fourth Flare extension</u>
	<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 recompleat 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 recompleat 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.)

WPX Energy requests a fourth extension to the 30 day flare period per NTL-4A. The current extension is through 12/31/13. This well is dedicated to Beeline and they are in the process of securing Right-of-Way through the BLM FFO and have not yet received authorization for the their 299 application. During the time that we need to continue flaring gas, while waiting on pipeline connection, WPX would propose to temporarily place a trailer mounted refrigeration unit on site to recover natural gas liquids. This would reduce VOCs going to flare approximately 66%. Please see attached proposal.

Attached is the latest gas analysis for this well with a recap of samples taken since gas was first available. This well is currently flowing at a rate on 350 mcf/pd

*Authorization granted until 90 days following issuance of approved BLM Row application*

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

Larry Higgins

Title Permit Supervisor

RCVD JAN 9 '14

OIL CONS. DIV.

DIST. 3

Signature

Date 12/23/13

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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.

NMOCDA

# WPX ENERGY.

## WPX Energy Production, LLC

In regards to the Mancos/Gallup oil development project WPX Energy currently has underway in Rio Arriba, Sandoval and San Juan counties, WPX Energy would like to propose the following changes in operations as a pilot program to reduce emissions and generate revenue from flare gas:

- 1) Temporarily place on a well site one 360 Mcf/d trailer mounted mobile refrigeration unit (Shown in Figure 1) downstream of the separator and upstream of the flare stack.

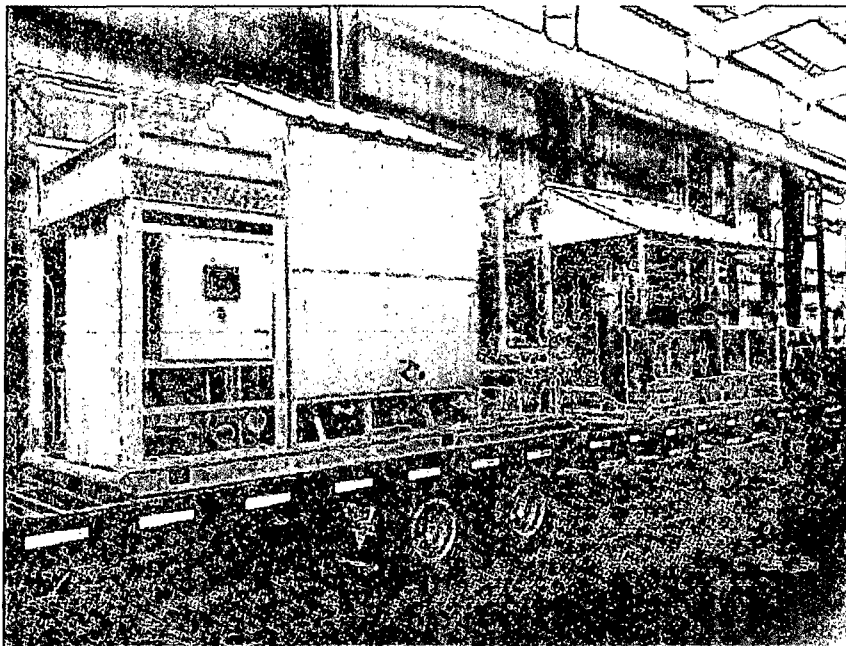


Figure 1: Recapture Solution's trailer mounted mobile refrigeration unit (MRU) .

- 2) Temporarily place a Porta Pak style 18,000 gallon, 108" diameter, ~41' long, 250psi liquids tank with tripod dry breakaway loading valves and ESVs. (Shown in Figure 2)

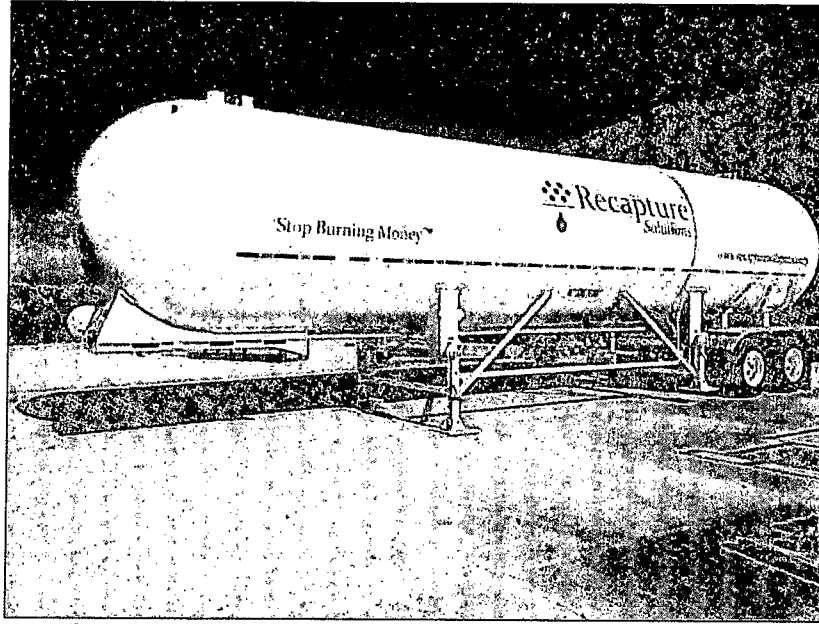


Figure 2: Recapture Solutions' portable liquids storage tank.

- 3) One 100kW to 150kW natural gas or propane powered generator to power the MRU.

**OBJECTIVE:**

WPX Energy would like to deploy Recapture Solutions' systems to reduce the emissions from the flare stack during the approved flaring periods and to generate gross revenue by selling a portion of the well gas to Recapture Solutions, LLC.

Recapture Solutions, LLC estimates a reduction of flare emissions for a 'typical' Mancos/Gallup horizontal oil well as follows:

**Estimated VOC reduction (%): 66%**  
**Estimated VOC reduction (t / mo, open flare): 1.25**  
**Estimated CO2 reduction (%): 21%**  
**Estimated CO2 reduction (t / mo, complete combustion): 240.72**

This operation will only take place on well sites that are awaiting pipeline connections and this operation will only take place during the approved flaring period for a specified well site.

## OPERATIONS:

Recapture Solutions, LLC will operate all of the equipment in the refrigeration system described above. The mobile refrigeration unit will be monitored continuously via satellite and a trained technician provided by Recapture Solutions, LLC will be onsite once a day to verify correct operations of the refrigeration equipment. The mobile refrigeration unit is equipped with redundant safety systems such as but not limited to: low/high pressure shut down controls, ESD system, dry break away loading valves, pressure relief valves and jersey barriers around the storage trailer. A simplified process flow diagram is shown in figure 4.

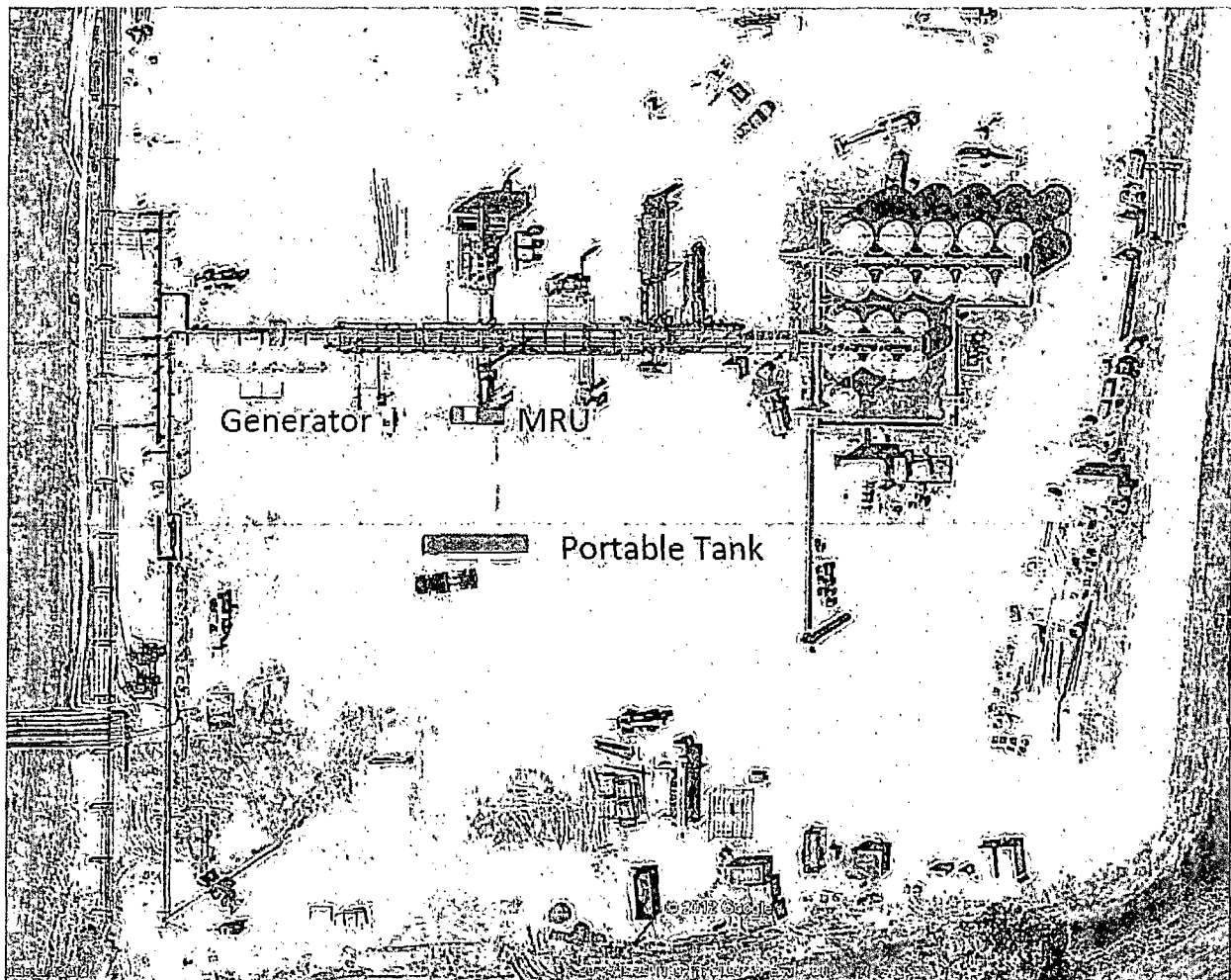
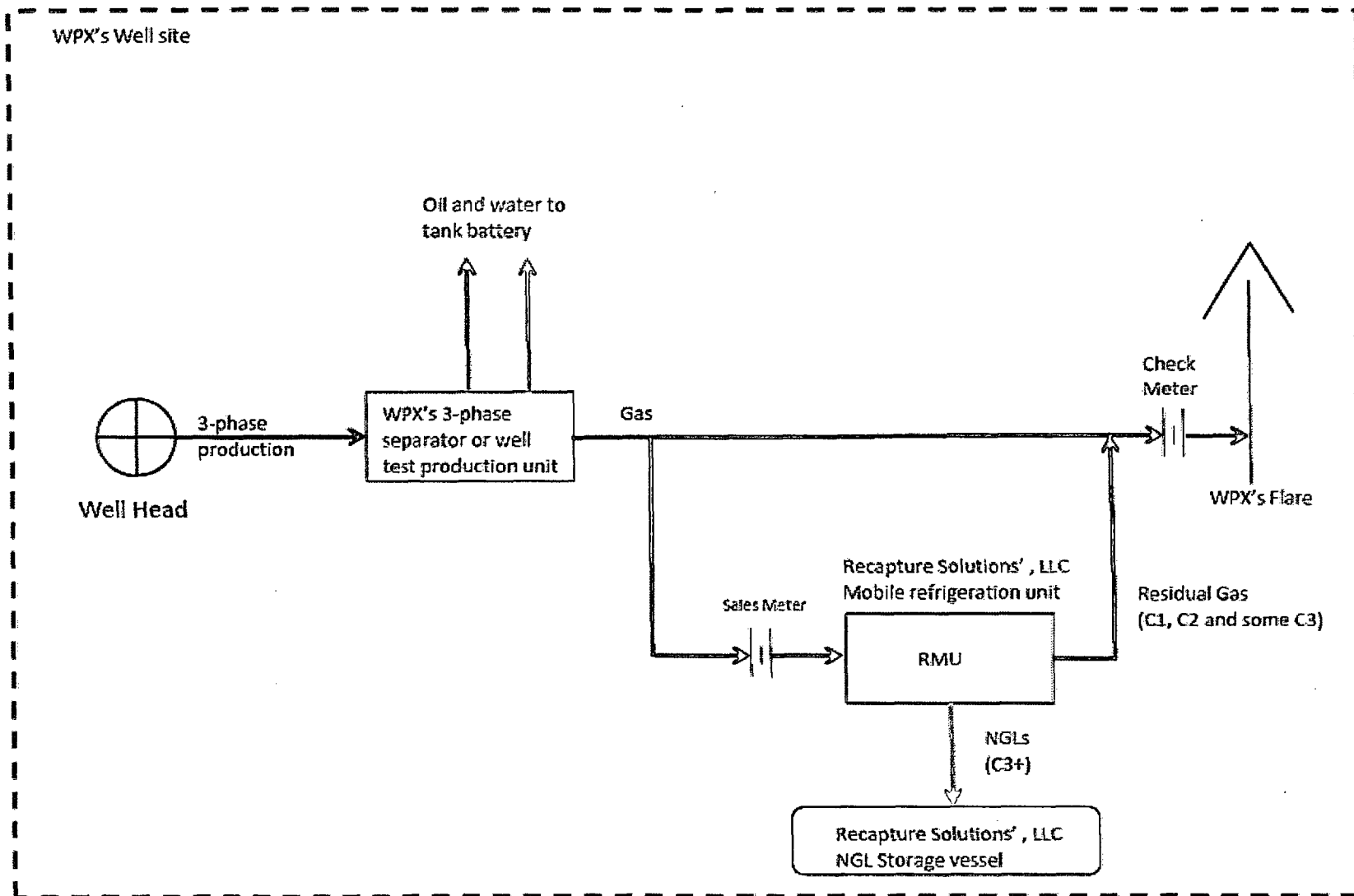


Figure 3: Example layout of a well site utilizing Recapture Solutions systems. The three labeled components consist of Recapture Solutions' equipment.

WPX Energy's environmental, health and safety department together with the operations group and Recapture Solutions' engineers have successfully completed a process hazard assessment of Recapture Solutions' refrigeration unit in accordance with WPX Energy's company policy.

The complete Process Hazard Assessment documentation is available upon request.



3rd Party natural gas  
pipeline under  
construction. 0-12 weeks  
lead time.

Figure 4: Process Flow Diagram

## **LOCATION**

In some instances, WPX Energy will have flow back or production operations before the gas gathering pipeline is tied in to the well site. There are multiple sites that WPX Energy would like to pilot this technology in an effort to reduce the environmental impact of the Mancos/Gallup development project as well as minimize the lost value associated with flaring activity.

WPX Energy has identified the following location as most suitable for testing the effectiveness of this technology:

**Chaco 2306-19M #191H, API No. 30-043-21139**



2030 Afton Place  
Farmington, NM 87401  
(505) 325-6622

Analysis No: WP130228  
Cust No: 85500-10995

### Well/Lease Information

Customer Name: WPX ENERGY PRODUCTION, LLC  
Well Name: CHACO 2306-19M #191H  
County/State:  
Location:  
Field:  
Formation:  
Cust. Stn. No.:

Source: N/A  
Pressure: 616 PSIG  
Sample Temp: DEG. F  
Well Flowing:  
Date Sampled: 12/04/2013  
Sampled By: ART ALSUP  
Foreman/Engr.: CODY BOYD

Remarks: RUN #04-05; OPERATOR CODE #9024

### Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	6.057	0.6690	0.00	0.0586
CO2	0.375	0.0640	0.00	0.0057
Methane	65.458	11.1420	661.13	0.3626
Ethane	13.479	3.6190	238.54	0.1399
Propane	9.749	2.6970	245.29	0.1484
Iso-Butane	1.225	0.4020	39.84	0.0246
N-Butane	2.646	0.8380	86.32	0.0531
I-Pentane	0.471	0.1730	18.84	0.0117
N-Pentane	0.349	0.1270	13.99	0.0087
Hexane Plus	0.191	0.0860	10.07	0.0063
Total	100.000	19.8170	1314.02	0.8197

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1322.6  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1299.6  
REAL SPECIFIC GRAVITY: 0.8228

GPM, BTU, and SPG calculations as shown  
above are based on current GPA factors.

DRY BTU @ 14.650: 1315.4  
DRY BTU @ 14.696: 1319.5  
DRY BTU @ 14.730: 1322.6  
DRY BTU @ 15.025: 1349.1

CYLINDER #: CHACO 12  
CYLINDER PRESSURE: 541 PSIG  
DATE RUN: 12/5/13 1:01 PM  
ANALYSIS RUN BY: AMANDA ARMENTA