

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-129  
Revised August 1, 2011

Submit one copy to appropriate  
District Office

NFO Permit No. \_\_\_\_\_  
(For Division Use Only)

**APPLICATION FOR EXCEPTION TO NO-FLARE RULE 19.15.18.12**

(See Rule 19.15.18.12 NMAC and Rule 19.15.7.37 NMAC)

30-043-21139

A. Applicant: WPX Energy Production, LLC

whose address is: P.O. Box 640, Aztec, NM 87410,

RCVD DEC 23 '13  
OIL CONS. DIV.  
DIST. 3

hereby requests an exception to Rule 19.15.18.12 until 12/31/13, for the following described tank battery (or LACT):

Name of Lease: Chaco 2306-19M #191H

Name of Pool: Lybrook Gallup

Location of Battery: Unit Letter M Section 19 Township 23N Range 6W

Number of wells producing into battery One

B. Based upon oil production of 190 barrels per day, the estimated volume

of gas to be flared is 350 MCFD; Value: \$1,176 per day.

C. Name and location of nearest gas gathering facility:

Beeline Gas Systems in NW qtr sec 18, T23N, R6W

D. Distance 10,000' Estimated cost of connection \$456,000.00

E. This exception is requested for the following reasons:

WPX Energy requests a flaring extension through 01/31/2014. 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. While waiting for a 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.

**OPERATOR**

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Larry Higgins

Printed Name  
& Title Larry Higgins, Permit Supervisor

E-mail Address larry.higgins@wpxenergy.com

Date: 12/23/13 Telephone No. (505) 333-1808

**OIL CONSERVATION DIVISION**

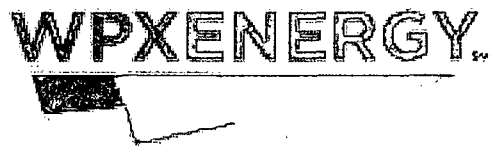
Approved Until 1/31/14

By Brandon Powell  
Deputy Oil & Gas Inspector,  
Title District #3

Date 12-31-13

\* Gas-Oil ratio test may be required to verify estimated gas volume.

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**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.

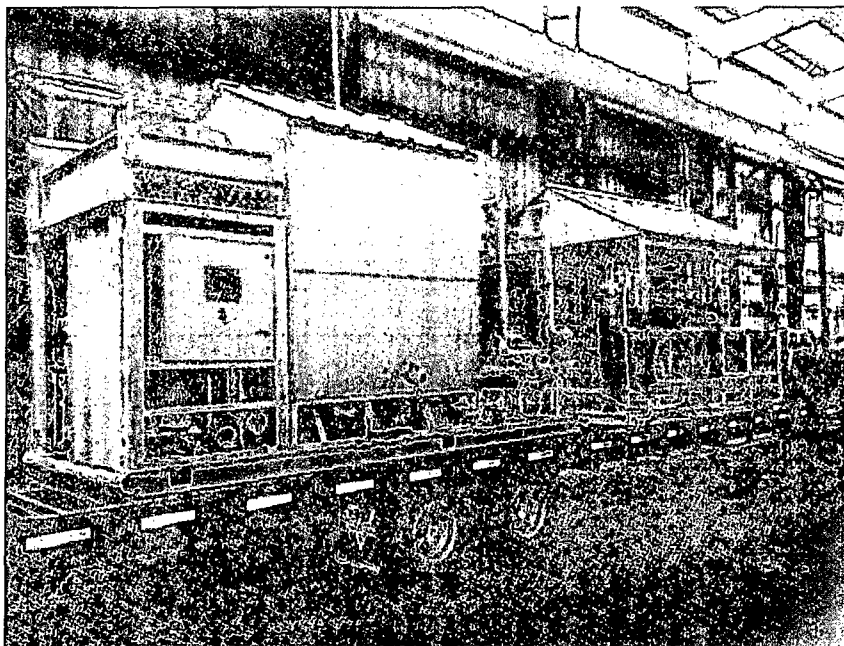


Figure 1: Recapture Solution's trailer mounted mobile refrigeration unit (MRU) .

- 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)

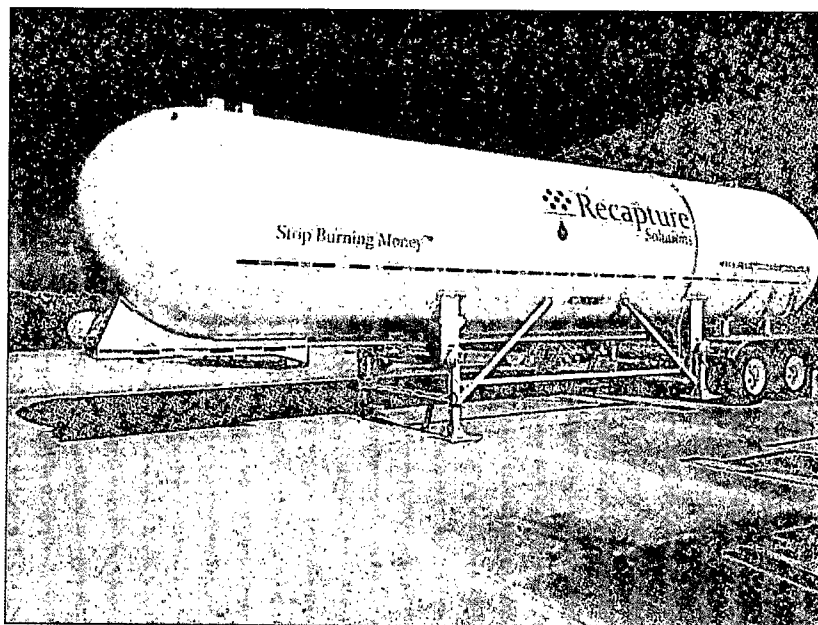


Figure 2: Recapture Solutions' portable liquids storage tank.

- 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.

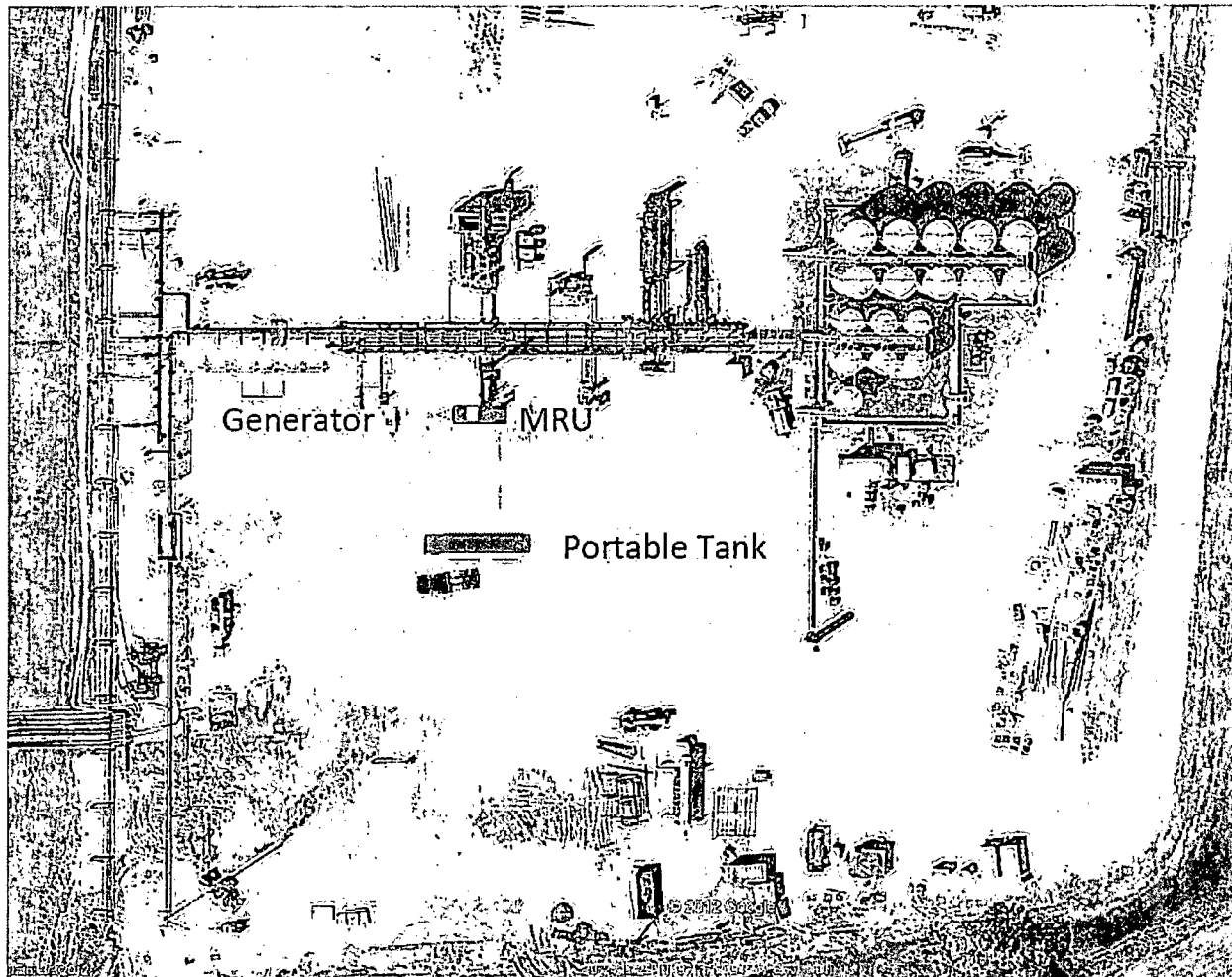


Figure 3: Example layout of a well site utilizing Recapture Solutions systems. The three labeled components consist of Recapture Solutions' equipment.

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.

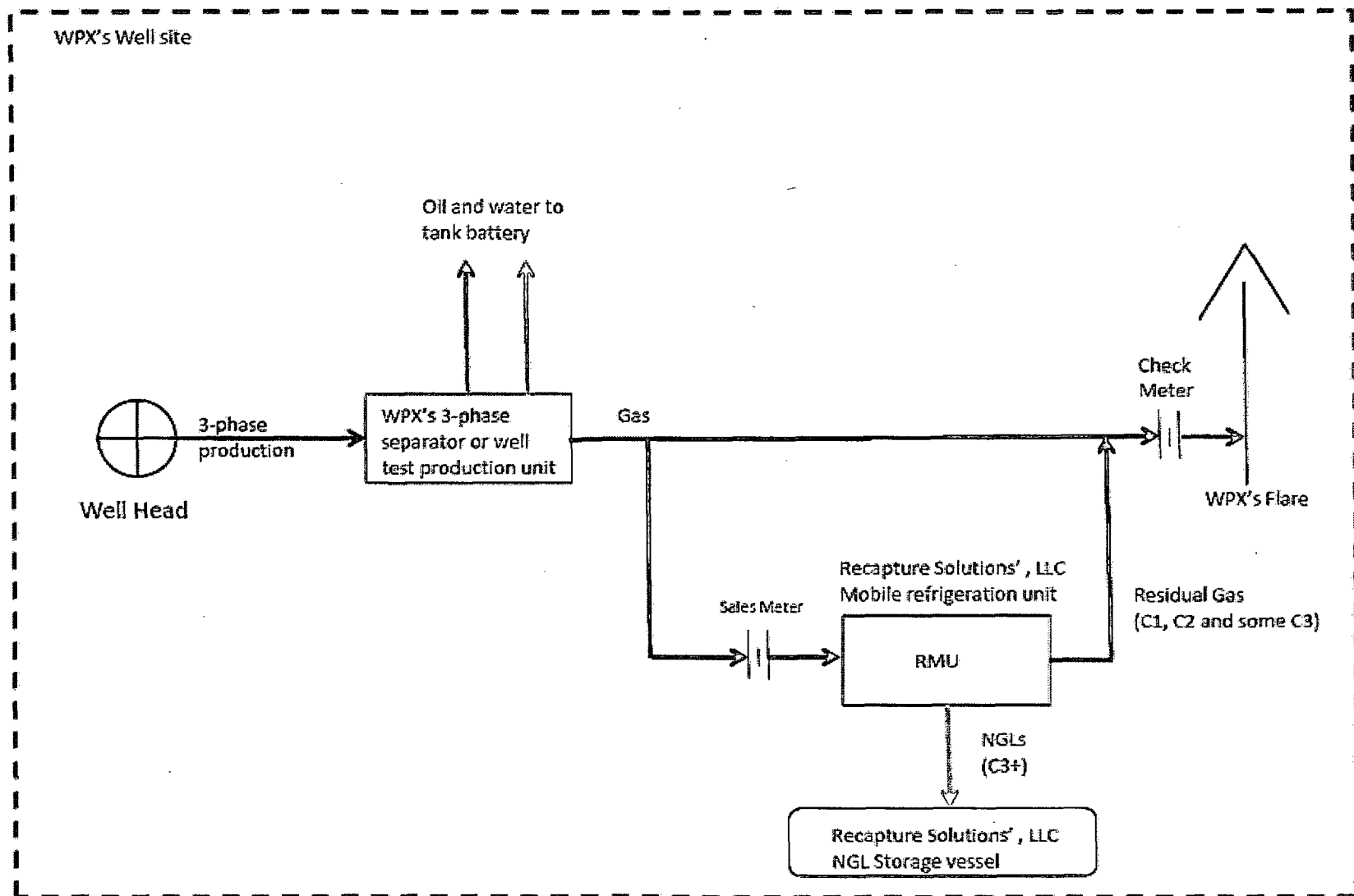


Figure 4: Process Flow Diagram

## **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. Str. 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