Form 3160-4
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMSF078094

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
MARKWEST RESOURCES INC
Contact: CINDY BUSH
E-Mail: cbush@markwest.com

8. Lease Name and Well No.
FULLERTON FEDERAL 112

3. Address 155 INVERNESS DRIVE WEST
ENGLEWOOD, CO 80111

3a. Phone No. (include area code)
Ph: 303.925.9283

9. API Well No.
30-045-31140-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface Sec 11 T27N R11W Mer NMP
NENW 730FNL 1975FEL

At top prod interval reported below

At total depth

10. Field and Pool, or Exploratory
BASIN FRUITLAND COAL

11. Sec., T., R., M., or Block and Survey or Area Sec 11 T27N R11W Mer NMP

12. County or Parish
SAN JUAN

13. State
NM

14. Date Spudded
03/05/2003

15. Date T.D. Reached
03/08/2003

16. Date Completed
☐ D & A ☒ Ready to Prod.
04/01/2003

17. Elevations (DF, KB, RT, GL)*
6038 GL

18. Total Depth: MD 1912
TVD

19. Plug Back T.D.: MD 1866
TVD

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
INDUCTION NEUTRON DENSITY

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☒ No ☐ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12.250	8.625 LS	23.0	0	189		100			
6.250	4.500 K55	11.0	0	1912		255			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	1810							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	FRUITLAND COAL	1830	1840	1654 TO 1789	0.450	58	OPEN
B)	FRUITLAND COAL	1830	1840	1830 TO 1840	0.450	40	OPEN
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
1654 TO 1789	FRAC W/110,000# 20/40 BRADY SAND IN 70Q FOAM W/25#
1654 TO 1789	ACDZ W/1500 GALS 15% HCL DROPPING 130-7/8" 1.3 SP
1830 TO 1840	ACDZ LOWER PERFS W/1000 GALS 15% HCL W/88-7/8" 1.3
1830 TO 1840	FRAC W/85,000# 20/40 BRADY SAND IN 70Q FOAM W/25#

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
04/03/2003	04/09/2003	24	→	0.0	1.0	1.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
64	140	140.0	→					PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
04/03/2003	04/09/2003	24	→	0.0	1.0	1.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
64	140	140.0	→					PGW

ACCEPTED FOR RECORD

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #20417 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED**

APR 16 2003

NMOCD

FARMINGTON FIELD OFFICE
BY _____

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
NACIMIENTO	0	752		OJO ALAMO	705
OJO ALAMO	752	853		KIRTLAND	860
				FRUITLAND	1480
				PICTURED CLIFFS	1851

32. Additional remarks (include plugging procedure):
NO REMARK PROVIDED

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #20417 Verified by the BLM Well Information System.
For MARKWEST RESOURCES INC, sent to the Farmington
Committed to AFMSS for processing by Steve Mason on 04/18/2003 (03SXM0732SE)

Name *(please print)* CINDY BUSH Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 04/09/2003

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 fradulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****