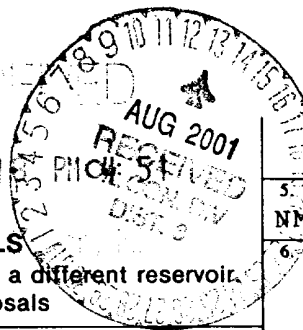


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.
NMSF 078094

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
EULLERTON FED. #6E

9. API Well No.
30-045-24639

10. Field and Pool, or Exploratory Area
West Kutz

11. County or Parish, State
SAN JUAN CO., NM

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
MARKWEST RESOURCES, INC. CONTACT: MIKE PIPPIN 505-327-4573

3. Address and Telephone No.
155 INVERNESS DRIVE WEST, #200, ENGLEWOOD CO 80112-5000

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FNL, 1850' FEL Sec. 11-Twp 27N-Rge 11W, NMPM

12. CHECK APPROPRIATE BOX(s) 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"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other Pre-Approved Commg'l.	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

MarkWest Resources respectfully requests permission to open the Gallup and commingle it with the existing Dakota producing formation per the attached procedure. This procedure will prevent loss of a valuable natural resource, which otherwise would be wasted.

MarkWest anticipates marginal production from the new Gallup pay add. The production from the existing Dakota formation is also marginal.

The above pool combination, i.e. Basin-Dakota (71599) and Kutz-Gallup (36550) is listed as a pre-approved in EMNRD-OCD Exhibit "A", Case No. 12346, Order No. R-11363.

Anticipated start date: July 21, 2001

DHC 1536, 4-25-97

Cc: NMOCD, Aztec Office

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

Signed [Signature]

Title Operations Manager

Date July 16, 2001

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any:

Title _____

Date _____

RECOMPLETE GALLUP & COMMINGLE W/DK

TD: 6550'
PBTD: 6487'

* Prior to rig-up and commencement of operations, review the attached general wellsite stipulations.

MARKWEST RESOURCES, INC.
FULLERTON FEDERAL #6E DK
B Sec. 11 – T27N – R11W, San Juan County, N.M.
790' FNL & 1850 FEL

* All information concerning the workover operations of this well shall remain **confidential** and shall not be released without the written consent of MarkWest Resources.

1. MOL & RU, test anchors, set pump, 2 frac tanks & air equipment. **All water to be 2% KCL.**
2. If necessary, kill well w/ water. Tbg is believed to be plugged w/sand.
3. ND WH, NU BOP. TOH w/2-3/8" tbg.
4. TIH w/3-7/8" bit & 4-1/2" csg scraper on 2-3/8" tbg to 5900'. **NOTE: Tight spot @ 4840'.** TOH.
5. MI wireline. Using attached logs, set 4-1/2" CIBP @ 5900'. Perf Gallup w/ 2-0.43" spf @ 5816'-34'. Total 36 holes.
6. TIH w/4-1/2" pkr on 2-3/8" tbg & set pkr @ 5860'. Pressure test CIBP @ 5900' to 2000 psi. PU & reset pkr @ 5800' & pressure test annulus to 2000 psi. W/pkr @ 5840', spot 100 gal 15% HCL acid. PU & reset pkr @ 5600'. Breakdown and attempt to balloff Gallup perfs (5816'-34') w/1500 gal 15% HCL acid & 40 – 1.3 sp gr 7/8" RCN perf balls. Max. pressure = 4500 psi. TIH to 5850' to knock off balls. TOH. TIH w/4-1/2" fullbore pkr on 2 jts (& 1- 8' sub) of 2-7/8" N-80 tbg & set @ 60' to protect wellhead. Prepare to frac.
7. Frac Gallup down 4-1/2" csg w/ 39,000 gals of 70 quality foam using 11,700 gals 30# gel as the base fluid and 80,000# 20/40 Brady sand. Pump @ 40 BPM. Max pressure is 3800 psi. Tag sand w/Ir-192 RA tracer. Treat per the following schedule:

<u>STAGE</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
PAD	8,000	2,400	0#
1.0 ppg	6,000	1,800	6,000#
2.0 ppg	8,000	2,400	16,000#
3.0 ppg	10,000	3,000	30,000#
4.0 ppg	7,000	2,100	28,000#
Flush (estimated)	<u>(3818)</u>	<u>(1146)</u>	<u>0#</u>
	39,000 gals	11,700 gals	80,000#

Shut well in after frac for 4 hours in an attempt to allow the gel to break. Treat frac fluid with the following additives per 1000 gallons:

- * 30# J-48 (Guar Gel mix in full tank – 16,000 gal)
- * 1.0 gal. Aqua Flow (Non-ionic surfactant mix in full tank)

MARKWEST RESOURCES, INC.
FULLERTON FEDERAL #6E DK
B Sec. 11 – T27N – R11W, San Juan County, N.M.
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- * 1.0# GVW-3 (Enzyme Breaker mix on fly)
- * 1.0# B-5 (Breaker mix on fly)
- * 5.0 gal Fracfoam 1 (Foamer mix on fly)
- * 0.38# FracCide 20 (Bacteriacide mix in full tank)

8. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Start on ¼" choke.
9. TIH w/3-7/8" bit on 2-3/8" tbg. Blow & CO Gallup frac w/air/mist. When well is stable, drill 4-1/2" CIBP @ 5900'. CO DK to PBTD6487' w/air/mist. When well is stable, TOH & run Pro-Technics after frac GR log from 6000'-5600' & 4750'-4650' (DV Tool @ 4691').
10. Rabbit IH w/2-3/8" 4.7# J-55 EUE tbg w/standard SN one jt off open ended bottom & again CO to 6487'. When wellbore is sufficiently clean, land tbg @ 6380'.
11. ND BOP & NU wellhead & tree. RDSU. Complete as a commingled Gallup & DK well. Unload & blow well as needed & place on line.

EQUIPMENT & VENDORS LIST

ITEM:	VENDOR	PHONE #
RIG:	KEY ENERGY SERVICES	970-563-9053 505-327-0416
RIG SUPERVISOR:	MIKE CONFER	505-599-7461 505-330-2022
ENGR. CONSULTANT	MIKE PIPPIN	505-327-4573 505-330-0495
DOWNHOLE TOOLS:	BAKER	505-325-0216
WELLHEAD	CAMERON	505-327-3402
STIMULATION COMPANY:	AMERICAN ENERGY	505-325-4192
WIRELINE:	BASIN	505-327-5244
TRUCKING:	DAWN	505-327-6314
FRAC TANKS:	LTR	505-327-3330

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WATER	C & J TRUCKING	505-325-7770
AIR PACKAGE	MOBILE AIR SERVICE	505-324-6712 505-320-2470
RA TAGGING	PRO-TECHNIQUES	505-326-7133

WELLBORE DIAGRAM

RECOMPLETE GALLUP & COMMINGLE W/DK

FULLERTON FEDERAL #6E DK

790' FNL & 1850' FEL (B) Sec. 11 T-27N, R11W

Basin Dakota

San Juan County, New Mexico

FMP 5/15/01

