

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr , Hobbs, NM 88240  
District II  
1301 W Grand Ave , Artesia, NM 88210  
District III  
1000 Rio Brazos Rd , Aztec, NM 87410  
District IV  
1220 S St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-34312
1. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Manana Gas, Inc.		6. State Oil & Gas Lease No.
3. Address of Operator c/o Walsh Engineering 7415 East Main Street, Farmington, NM 87402		7. Lease Name or Unit Agreement Name Royal Flush
4. Well Location Unit Letter <u>  N  </u> : <u>  660'  </u> feet from the <u>  South  </u> line and <u>  1945'  </u> feet from the <u>  West  </u> line Section <u>  22  </u> Township <u>  29N  </u> Range <u>  11W  </u> NMPM County <u>  San Juan  </u>		8. Well Number #1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5428' GR		9. OGRID Number 13931
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type <u>          </u> Depth to Groundwater <u>          </u> Distance from nearest fresh water well <u>          </u> Distance from nearest surface water <u>          </u>		
Pit Liner Thickness: <u>          </u> mil Below-Grade Tank: Volume <u>          </u> bbls; Construction Material <u>          </u>		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Manana Gas Company has fraced the Fruitland Coal formation as described on the attached Treatment Report.

RCVD AUG 14 '07

OIL CONS. DIV.  
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Paul C. Thompson TITLE Agent DATE 8/8/07

Type or print name Paul G. Thompson, P.E. E-mail address: paul@walsheng.net Telephone No. 505-327-4892

**For State Use Only**

APPROVED BY: A. Villanueva TITLE Deputy Oil & Gas Inspector, District #3 DATE AUG 15 2007

Conditions of Approval (if any):

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**FRACTURE TREATMENT REPORT**

**Operator:** Manana Gas, Inc. **Well Name:** Royal Flush #1  
**Date:** 31-Jul-07  
**Field:** Basin Fruitland Coal **Location:** 22/29N/11W **County:** San Juan **State:** NM  
**Stimulation Company:** Blue Jet & Halliburton **Supervisor:** Paul Thompson

**Stage #:** 1/2 **Lower Fruitland Coals**

**Sand on location:** **Design:** 60,000 **Weight ticket:** 144,080 **Size/type:** 20/40 Brady

**Fluid on location :** **No. of Tanks:** 6 **Strap:** 20' **Amount:** 2400 **Usable:** 2160

**Perforations:**

**Depth:** 1545 - 49 & 1602 - 08 **Total Holes:** 40 **PBTD:** 1785'  
**Shots per foot:** 4 spf **EHD:** 0.34"

**Breakdown:**

**Acid:** 1,000 gal of 10% formic

**Balls:** 60 7/8" 1.3 sp.gr.

**Pressure:** 1727 - 1070 **Rate:** 6.2 BPM

The formation broke at 1903 psi.  
Very little ball action until the end of  
acid, then a complete ball-off to  
3500 psi. Recvd 60 balls with 37 hits  
650 psi drop due to the acid

**Stimulation:**

**ATP:** 1250 psi **AIR:** 18.2 BPM

**MTP:** 1525 psi **MIR:** 20.3 BPM

	Sand Stage	Pressure	Rate	BHTP
ISIP: 990	pad	1504	20 3	2057
5 min: 964	1 ppg	1449	20 1	2019
10 min: 931	2 ppg	1297	18 2	1919
15 min: 905	3 ppg	1202	16 1	1872
	4 ppg	1164	16 2	1862
	with SW 4 ppg	1157	16 3	1857

**Job Complete at:** 1255 hrs. **Date:** 7/31/2007 **Start flow back:** 1845 hrs

**Total Fluid Pumped:** 840 bbls

**Total Sand Pumped:** 60,000# **Total Sand on Formation:** 60,000#

**Total Nitrogen Pumped:** NA

**Notes:**

All frac fluid was Bloomfield City water with 2% KCl and biocide and contained 20#/1000 gal guar gel, borate crosslinker, surfactant, enzyme and encapsulated breakers. Lowered the injection rate during the 2 and 3 ppg stages but the Nolte plot stayed fairly flat throughout the job. The last 10,000# of 20/40 sand was treated with Sand Wedge. The frac gradient based on the ISIP was 1.06 psi/ft.

**FRACTURE TREATMENT REPORT**

Operator: Manana Gas, Inc. Well Name: Royal Flush #1  
Date: 31-Jul-07  
Field: Basin Fruitland Coal Location: 22/29N/11W County: San Juan State: NM  
Stimulation Company: Blue Jet & Halliburton Supervisor: Paul Thompson

Stage #: 2/2 Upper Fruitland Coals

Sand on location: Design: 84,000# Weight ticket: 144,080 Size/type: 20/40 Brady

Fluid on location : No. of Tanks: 6 Strap: Various Amount: 1710 Usable: 1490

**Perforations:**

Depth: 1440 - 44 & 1452 - 60' Total Holes: 48 PBTD: 1525'  
Shots per foot: 4 spf EHD: 0.34" Frac Plug  
PT to 3500 - held OK

**Breakdown:**

Acid: 1,000 gal of 10% formic

Balls: 60 7/8" 13 sp.gr.

Pressure: 1504 Rate: 5.8 BPM

The formation broke at 1986 psi  
Very little ball action until the end of  
acid, then a complete ball-off to  
3500 psi. Knocked off balls.

**Stimulation:**

ATP: 1400 psi AIR: 18.7 BPM

MTP: 1602 psi MIR: 20.5 BPM

	Sand Stage	Pressure	Rate	BHTP
ISIP: 1073	pad	1571	20.5	2082
5 min: 980	1 ppg	1450	18.4	2013
10 min: 948	2 ppg	1396	18.4	1986
15 min: 922	3 ppg	1345	18.3	1972
	4 ppg	1318	18.2	1976
	4 ppg with SW	1312	18.3	1966

Job Complete at: 1625 hrs. Date: 7/31/2007 Start flow back: 1845 hrs

Total Fluid Pumped: 1211 bbls

Total Sand Pumped: 84,000# Total Sand on Formation: 84,000#

Total Nitrogen Pumped: NA

**Notes:**

All frac fluid was Bloomfield City water with 2% KCl and biocide and contained 20#/1000 gal guar gel, borate crosslinker, surfactant, enzyme and encapsulated breakers. Lowered the injection rate during the 1 ppg stage but the Nolte plot stayed fairly flat throughout the job. The last 10,000# of 20/40 sand was treated with Sand Wedge. The frac gradient based on the ISIP was 1.18 psi/ft.