

ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special				Test Date 5-29-85		Flac	
Company Amoco Production Co.				Connection Northwest Pipeline Corp.		846201-01-0	
Pool Undes				Formation Gallup		Unit Rosa	
Completion Date 5-24-85		Total Depth 8750		Plug Back TD 8700'		Elevation 6767'	
Farm or Lease Name Rosa Unit		Well No. 104		Perforations: From 7382' To 7804'			
Csg. Size 4.500	Wt. 11.6	d 4.000	Set At 8750	Perforations: From open To ended		Unit Sec. Twp. Rge. H 14 31 4	
Thq. Size 2.375	Wt. 4.6	d 1.995	Set At 7812				
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Single				Packer Set At None		County Rio Arriba	
Producing Thru tubing		Reservoir Temp. °F 250 <sub>g</sub>		Mean Annual Temp. °F		Baro. Press. - P <sub>g</sub>	
State New Mexico							
L	H	G <sub>g</sub>	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> S	Prover	Meter Run
Taps							

  

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	8 days						1546		1550		
1.	2.375		.750				70		289		3 hrs.
2.											
3.											
4.											
5.											

  

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	12.365		92	1.000	.9258	1.008	1062
2.							
3.							
4.							
5.							

  

NO.	P <sub>t</sub>	Temp. °R	T <sub>t</sub>	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.					Specific Gravity Separator Gas	XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

  

NO.	P <sub>t</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1		301	90601	2349243
2				
3				
4				
5				

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0387$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1093$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0288$

  

Absolute Open Flow	1093	Mcf/d @ 15.025	Angle of Slope $\theta$	Slope, n .75
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Remarks:			
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Approved By Division	Conducted By: B&R Services	Calculated By: J.J. Barnett	Checked By: 
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Budget Bureau No. 1004-0135  
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME Rosa Unit
2. NAME OF OPERATOR Amoco Production Company		8. FARM OR LEASE NAME
3. ADDRESS OF OPERATOR 501 Airport Drive Farmington, NM 87401		9. WELL NO. 104
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1720' FNL X 1150' FEL 1820' 1210'		10. FIELD AND POOL, OR WILDCAT Basin Dakota/Undes. Gallup
14. PERMIT NO.		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE/NE Sec. 14, T31N, R4W
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6767' GR		12. COUNTY OR PARISH Rio Arriba
		13. STATE NM

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>
REAT WELLS	<input type="checkbox"/>
OTHER	<input type="checkbox"/>

PULL OR ALTER CASING	<input type="checkbox"/>
MULTIPLE COMPLETION	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>
CHANGE PLANS	<input type="checkbox"/>

WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>
(Other) Completion	<input checked="" type="checkbox"/>

REPAIRING WELL	<input type="checkbox"/>
ALTERING CASING	<input type="checkbox"/>
ABANDONMENT*	<input checked="" type="checkbox"/>

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

17. WELL 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.)

Moved in and rigged up service unit 12-3-84. Total depth of the well is 8750' and plugback depth is 8620'. Pressure tested production casing to 6400 psi. Perforated the following Dakota intervals: 8378'-8338', 8417'-8390', 8458'-8426', 2 jspf, .38" in diameter, for a total of 198 holes. Fraced interval 8338'-8458' with 56,000 gal 60#, 70,000 gal 50# delayed crosslinked gel and 234,000# 20-40 sand.

Perforated the following Gallup intervals: 7480'-7382', 7804'-7604', 1 jspf, .38" in diameter, for a total of 298 holes. Fraced Gallup interval 7604'-7804' with 125,622 gal 50# gel and 145,000# 20-40 sand.

Squeezed bradenhead with 295 cu. ft. Thixotropic cement. Pressure tested to 3800 psi.

Set a packer at 7912' and a sliding sleeve at 7909'. Landed 2-3/8" tubing at 8435' and released the rig on 1-2-85.

RECEIVED

JAN 28 1985

OIL CON. DIV.

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

SIGNED Original Signed By B. D. Shaw TITLE Admin. Supervisor

DIST. 3  
DATE 1-7-85

(This space for Federal or State office use)

ACCEPTED FOR RECORD

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE  
DATE JAN 28 1985

FARMINGTON RESOURCE AREA

RY

\*See Instructions on Reverse Side

NMOCC