

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4-30-80				
Company CONOCO, INC.					Connection EL PASO NATURAL GAS				
Pool JALMAT GAS					Formation YATES				
Completion Date 3-6-80					Total Depth 3585'		Plug Back TD 3145'		Elevation 3343'GL
Farm or Lease Name VAUGHAN A-14					Unit NMFU				
Csg. Size 7"	Wt. 23 #	d 6.366	Set At 3580'	Perforations: From 2954' To 3083'					Well No. 7
Tbg. Size 2 3/8"	Wt. 4.7 #	d 1.995	Set At 2930'	Perforations: From OPEN To ENDED					Unit Sec. Twp. Rge. N 14 24S 36E
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE					Packer Set At NONE				
Producing Thru TUBING					Reservoir Temp. °F 90° @ 3019'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2
State NEW MEXICO									
L 2930'	H 2930'	G _g .653	% CO ₂ 1.60	% N ₂ 1.87	% H ₂ S .26	Prover		Meter Run 4"	Taps FLANGE

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	48 HRS						378		378		
1.	4"	X	2.000"	11	1.0	82	368		368	STABILIZED	45 MIN.
2.	4"	X	2.000"	11.7	4.0	77	340		340		1 HR.
3.	4"	X	2.000"	11.7	7.6	79	303		303		1 HR.
4.	4"	X	2.000"	12	10.6	78	265		265		1 HR.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	4.919	24.2	.9795	1.237	NIL	118
2	19.81	9.980	24.9	.9840	1.237	NIL	241
3	19.81	13.754	24.9	.9822	1.237	NIL	331
4	19.81	16.344	25.2	.9831	1.237	NIL	394
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1.	.04	542	1.47	NIL	A.P.I. Gravity of Liquid Hydrocarbons NONE Deg.	
2.	.04	537	1.46	NIL	Specific Gravity Separator Gas .653 X X X X X X X X	
3.	.04	539	1.46	NIL	Specific Gravity Flowing Fluid X X X X X	
4.	.04	538	1.46	NIL	Critical Pressure 674 P.S.I.A. P.S.I.A.	
5.					Critical Temperature 368 R R	

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	145.31	381.2	145.31	7.73	2.023	1.457
2	124.75	353.2	124.75	28.27		
3	99.98	316.2	99.98	53.06		
4	77.40	278.2	77.40	75.64		
5					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ 574.02	

Absolute Open Flow 574 Mcfd @ 15.025	Angle of Slope 61.9	Slope, n .534
---	----------------------------	----------------------

Remarks: **NO FLUID PRODUCED DURING TEST.**

Approved By Commission: John W. Ramsey	Conducted By: T.C. ADUDELL	Calculated By: T.C. ADUDELL	Checked By:
--	--------------------------------------	---------------------------------------	-------------

1000

$P_L = 153.04$

$\phi = 61.9^\circ$
 $\eta = .534$

105
 10
 10

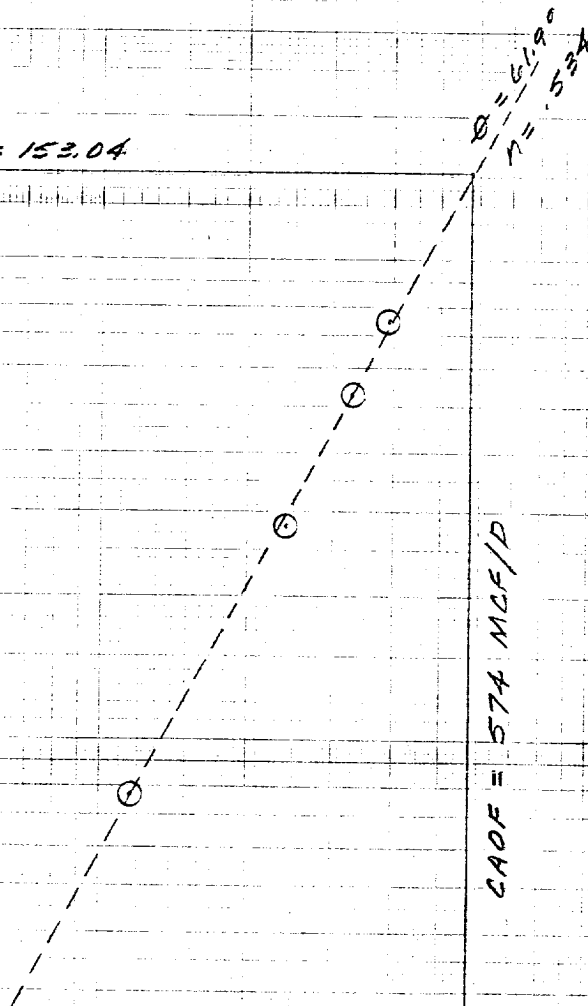
CARF = 574 MCF/D

VOLUME (MCF/D)

100

500

1000



Form 9-331
Dec. 1973Form Approved.
Budget Bureau No. 42-R1424UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐
2. NAME OF OPERATOR
Conaco Inc.
3. ADDRESS OF OPERATOR
P.O. Box 460 Hobbs, N.M. 88240
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 990' FSL & 2310' FWL
AT TOP PROD. INTERVAL: Same
AT TOTAL DEPTH: Same
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF ☐
- FRACTURE TREAT ☐
- SHOOT OR ACIDIZE ☐
- REPAIR WELL ☐
- PULL OR ALTER CASING ☐
- MULTIPLE COMPLETE ☐
- CHANGE ZONES ☐
- ABANDON* ☐
- (other) ☐

SUBSEQUENT REPORT OF:

- ☐
- ☐
- ☒
- ☐
- ☐
- ☐
- ☐
- ☐

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. 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.)*

MIRU 3-4-80. Set omt. retainer @ 3145'. Squeeze perfs. w/ 200sx. class "C" emt. Spot 3 bbls. 15% HCl-NE @ 2954'-3090'. Perf. @ 2954', 56', 58', 59', 60', 62', 71', 87', 94', 2998', 3002', 06', 27', 38', 45', 63', 68', 70', 3083 w/ 1 JS PF. Acidize from 3120' to 3014' w/ 10 bbls. 15% HCl-NE. Acidize @ 3014'-2978' w/ 7 bbls. HCl-NE. Acidize @ 2978'-2930' w/ 10 bbls. HCl-NE.

Frac w/ 10,000 gal. CO₂, 10,000 gal. gelled KCl wtr., 3000# 20/40 sand, & 18,000# 10/20 sand. Flush to perfs. w/ 4425 gal. CO₂ & KCl wtr.

Swabbed well. Ran BHP survey. Put well on production.

Test: OBOPD SBOPD 671 MCFPD

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED W. A. Butler TITLE Admin. Supervisor DATE 3/28/80

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: _____U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

79107
CUBA W. 1800

RECEIVED

APR 6 1980

OIL CONSERVATION DIV.

DATE March 31, 19 80

CORRECTED COPY *

ADVICE ON WELLS TIED INTO GAS GATHERING SYSTEMS

Name of Producer	Conoco, Inc. (1540)
Well Name and Number	Vaughn A-14 #7 *
Location	990'S, 2310'W, Sec. 14, T-24-S, R-36-E, Lea Co., NM
Pool Name	Jalmat Yates
Producing Formation	Seven Rivers
Top of Gas Pay	3,180'
Oil or Gas Well	Oil
Gas Unit Allocation	40 Acres
Date Tied Into Gathering Systems	March 21, 1980
Date of First Delivery	March 21, 1980
Gas Gathering System	Lea County Low Pressure G/S
Processed through Gasoline Plant (yes or no)	Yes
Station Number	64-089-01
Remarks:	Site Code: 28341-0-01
	Casinghead well

By: Travis R. Elliott Dispatching

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐
2. NAME OF OPERATOR
Conoco Inc.
3. ADDRESS OF OPERATOR
P. O. Box 460, Hobbs, NM 88240
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 990' FSL 22310' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) ☐

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐
☐
☐

RECEIVED

JAN 9 1980

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

5. LEASE
LC-030467a
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
1111FLL
8. FARM OR LEASE NAME
Vaughan A-14
9. WELL NO.
7
10. FIELD OR WILDCAT NAME
Jalmar Yates 7 Kvs Trans 1
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 14, T-24S, R-36E
12. COUNTY OR PARISH
Lea
13. STATE
NM
14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3344.6' GR

17. 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.)*

Status of Well: Shut In

Approximate date that temp. aban. commenced: 10-3-79

Reason for temp. aban.: Holding for engineering study.

Future plans for well: Recomplete

Approximate date of future W. O. or plugging: Within 3 or 4 months

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Bern A. La TITLE Administrative Supervisor DATE 11 8 1979

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF

APPROVAL, IF ANY:

ACCEPTED FOR RECORD

JAN 17 1980

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

*See Instructions on Reverse Side

USGS
NMFL-4
File

RECEIVED

RECEIVED
JAN 22 1980
OIL CONSERVATION DIV.

RECEIVED

JAN 22 1980

OIL CONSERVATION DIV.

CLAY TO O. C. C.

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil ☒ gas ☐ other ☐
well well

2. NAME OF OPERATOR

Conoco Inc.

3. ADDRESS OF OPERATOR

P.O. Box 460, Hobbs, N.M. 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 990' FSL & 2310' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☒
ABANDON* ☐

(other) request to perf. additional pay

17. 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.)*

It is requested to perf. & complete additional pay as follows:

MIRU & pull production equipment. GIN w/ cmt. retainer, setting it at 3145' KBM.

Squeeze perfs. thru cmt. retainer w/ 200 sk. class "C" cmt. & reverse out excess cmt. Spot 3 bbls. 15% HCl-NE from 3090'-2954'.

Perf. csq. @ 2954', 54', 58', 59', 60', 62', 71', 81', 94', 98', 3002', 3006',

3027', 38', 40', 63', 68', 70', 83' w/ 1 ISPF. Set bridge plug @ 3120'

& pkr. @ 3014'. Pmp. 10 bbl. 15% HCl-NE. Pump. 7 bbl. 15% HCl-NE from 3014'-3078'.

Pmp. 10 bbl. 15% HCl-NE from 3014'-3080'. Frac. treat perfs. w/ 20,000 gal. frac. fluid, 3000# 20/40 sd., 18000# 10/20 sd. Flush w/ 4425 gal. CO₂. Return to production.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Wm A. Butterfield TITLE Admin. Supervisor DATE 10/5/79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

USGS - 5
NMFU - 4
FILE - 1

*See Instructions on Reverse Side

5. LEASE

LC-030467 a

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

N.M.F.U.

8. FARM OR LEASE NAME

Vaughan A-14

9. WELL NO.

7

10. FIELD OR WILDCAT NAME

Jalmit Yates 7 Rvrs Transl

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 14, T. 24 S, R. 36 E

12. COUNTY OR PARISH

Lea

13. STATE

N.M.

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

3344.6' 6R

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

APPROVED
DATE OCT 10 1979
ACTING DISTRICT ENGINEER

RECEIVED
OCT 16 1957

REMOVED

RECEIVED
OCT 16 1957
O.C.D. HOBBS, OFFICE