



*Sent e-mail to B. Stone to request extrajudicial
5 day build-up on the Dakota.*

Southern

Rockies

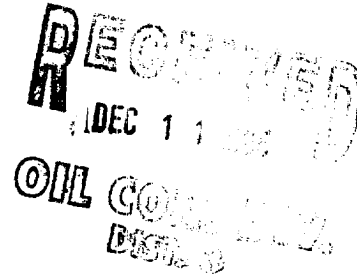
Business

Unit

December 6, 1995

Mr. Benjamin E. Stone
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Application for Exception to Rule 303-C
Downhole Commingling
Bolack E #1M
1590' FSL & 1090' FNL, Unit I Section 33-T28N-R8W
Blanco Mesaverde and Basin Dakota Pools
San Juan County, New Mexico



Referencing your letter dated July 25, 1995 wherein our administrative application for downhole commingling was disqualified for the subject well. This application was disqualified on the basis that the lower pressure zone must not be less than 50% of the higher pressure zone. As you may recall, we were making application before this well was drilled and estimating pressures from offset information. Now that we have drilled the well, we have run pressure bombs to record pressures for each of the formations.

We perforated and fracture stimulated the Dakota, then flowed back the well until no nitrogen was present. A pressure bomb was set for 3 days recording shut-in formation pressure. Pressure gradients were then measured and recorded coming out of the hole. A cast iron bridge plug was set above the Dakota and the same procedure was followed for the Mesaverde with the exception that the pressure bomb was left in the well for 5 days. Attached you will find the recorded pressures and gradients for the Mesaverde and the Dakota formations.

As you can see, the pressure at 4500' (which is the approximate depth of the Mesaverde perforations) records a pressure of 641.1 psi. The Dakota when measured at the depth corresponding to Mesaverde perfs (4500') is 1253.6 psi. The difference between these two pressures is 51% when adjusted to the common datum of the Mesaverde in this well. Therefore, the pressure does meet rule 303-C(1)(b)(vi).

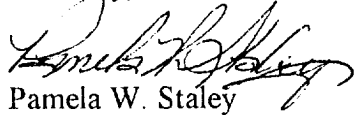
I do not believe that there was any protest to our application at the time it was submitted. Since we have run pressure tests on the actual formations to be commingled, we request that you reconsider approving our application. This well was cased with 3 1/2" casing which makes a dual completion very difficult. We believe that this is the best way to produce this well and will await your decision.

✓

Should you have questions or wish to discuss this further, do not hesitate to contact me at (303) 830-5344.

Again, thank you for your assistance.

Sincerely,



Pamela W. Staley

Enclosures

cc: Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Mark Rothenberg, Amoco
Patty Haefele, Amoco

Oil Conservation Division

July 25, 1995

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201

Attn: Pamela W. Staley

Re: Disqualified Application for Downhole Commingling

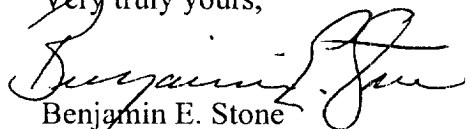
Dear Ms. Staley:

Reference is made to your recent application for downhole commingling in Amoco's Bolack 'E' Well No.1E. Please note that to qualify for administrative approval, the lower pressure zone must not be less than 50% of the higher pressure zone.

Additionally, Mr. Ernie Busch of the Aztec district office of the Division, has advised me that the well does not require a permit for a non-standard proration unit nor for an unorthodox location. Mr. Busch may assist you in this matter.

If you would like to pursue the application for downhole commingling, the matter may be set for an examiner hearing at your request.

Very truly yours,


Benjamin E. Stone
Petroleum Engineering Specialist

/BES

cc: Oil Conservation Division - Aztec

OFFICE OF THE SECRETARY - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5950
ADMINISTRATIVE SERVICES DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5925
ENERGY CONSERVATION AND MANAGEMENT DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5900
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MINING AND MINERALS DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5970
OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-7131
PARK AND RECREATION DIVISION - P. O. BOX 1147 - SANTA FE, NM 87504-1147 - (505) 827-7465



HALLIBURTON

HALLIBURTON ENERGY SERVICES

3110 East Bloomfield Highway / Post Office Box 1590 / Farmington, New Mexico 87401 / Tel: 505-327-4731 / Fax: 505-326-7510

DAKOTA

BOTTOM HOLE PRESSURE REPORT

CUSTOMER:AMOCO PROD.CO.
LEASE:BOLACK E1E
DATE:10-17-95
STATIC GRADIENT SURVEY
WELLHEAD GAUGE 1105#
TAGGED T.D.6606'W/L MEAS.

DEPTH	PRESSURE	GRADIENT
-0-	1104.1	
1000	1138.0	.034
2000	1169.9	.032
3000	1203.8	.034
4000	1237.7	.034
4500	1253.6	.032
5000	1319.4	.132
5500	1397.2	.156
6000	1457.0	.120
6200	1473.0	.080
6400	1492.9	.099
6600	1530.8	.189



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MESAVERDE

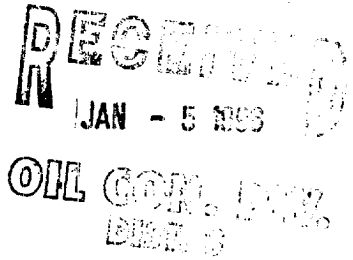
BOTTOM HOLE PRESSURE REPORT

CUSTOMER:AMOCO PROD.CO.
LEASE:BOLACK E1M
DATE:11-27-95
STATIC GRADIENT SURVEY
WELLHEAD GAUGE TBG.570#
TAGGED T.D.4558'W/L MEAS.

DEPTH	PRESSURE	GRADIENT
-0-	566.0	
1000	583.1	.017
2000	600.2	.017
3000	617.4	.017
4000	631.9	.014
4250	635.8	.016
4500	641.1	.021
4558	656.9	.272

OIL CONSERVATION DIVISION

January 4, 1996



Amoco Production Company
P.O. Box 800
Denver, Colorado 80201

Attn: Ms. Pamela W. Staley

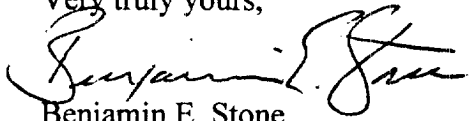
Re: Recent Application for Downhole Commingling on the Bolack 'E' Well No.1M.

Dear Ms. Staley:

Reference is made to your recent application for the Bolack 'E' Well No.1M. Mr. Frank Chavez, supervisor of the Division's Aztec district office, has requested that the pressure build-up on the Dakota zone also be recorded for a period of five days. In his recommendation he stated that past experience has shown that the Dakota will often exceed the Mesaverde. As our supervisors have this authority in their districts, I would ask that you have this test performed at your convenience. If the results still correspond with applicable rules, I will expedite the approval of your application at that time.

I apologize for any delay in operations. If you would like to visit with Mr. Chavez, he may be reached at (505) 334-6178.

Very truly yours,


Benjamin E. Stone
Petroleum Engineering Specialist

/BES

cc: Oil Conservation Division - Aztec

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District I
PO Box 1980, Hobbs, NM 88241-1980

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-104
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address Amoco Production Company P.O. Box 800 Denver, CO 80201		OGRID Number 000778
		Reason for Filing Code NW
API Number 30 - 0 45-29251	Pool Name Basin Dakota	Pool Code 71599
Property Code 329	Property Name Bolack E	Well Number 1M

II. Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
I	33	28N	8W		1590	South	1090	East	San Juan

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Lee Code F	Producing Method Code	Gas Connection Date	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date				

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	POD	O/G	POD ULSTR Location and Description
9018	Giant Refining Co. P.O. Box 12999 Scottsdale, AZ 85267	2817062	O	
007057	El Paso Natural Gas P.O. Box 4990 Farmington, NM 87499-4990	2817063	G	

IV. Produced Water

POD	POD ULSTR Location and Description
2817064	

V. Well Completion Data

Spud Date	Ready Date	TD	PBTD	Perforations	DHC, DC, MC DHC
7/11/95	12/15/96	6662'	6649'	6494-6612'	
Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement		
12.25"	9.625"	89'	60 sx Class B		
7.875"	7.000"	2401'	340 sx Class B		
6.25"	3.500"	6662'	610 sx Class B		
	1.5" tubing	6569'			

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date	Test Length	Thg. Pressure	Csg. Pressure
		2-14-96	24	66	320
Choke Size	Oil	Water	Gas	AOF	Test Method
32/64	0	0	1400		F

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Patty Haefele

Printed name:

Patty Haefele

Title:

Staff Assistant

Date:

2/18/96

Phone:

(303) 830-4988

Craig S. signed
Approved by: 51

OIL CONSERVATION DIVISION

Title:

DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date:

MAR 1 2 1996

If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature

Printed Name

Title

Date

IF THIS IS AN AMENDED REPORT, CHECK THE BOX LABELED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT

Report all gas volumes at 15.025 PSIA at 60°.
Report all oil volumes to the nearest whole barrel.

A request for allowable for a newly drilled or deepened well must be accompanied by a tabulation of the deviation tests conducted in accordance with Rule 111.

All sections of this form must be filled out for allowable requests on new and recompleted wells.

Fill out only sections I, II, III, IV, and the operator certifications for changes of operator, property name, well number, transporter, or other such changes.

A separate C-104 must be filed for each pool in a multiple completion.

Improperly filled out or incomplete forms may be returned to operators unapproved.

1. Operator's name and address
2. Operator's OGRID number. If you do not have one it will be assigned and filled in by the District office.
3. Reason for filing code from the following table:

NW	New Well
RC	Recompletion
CH	Change of Operator (Include the effective date.)
AO	Add oil/condensate transporter
CO	Change oil/condensate transporter
AG	Add gas transporter
CG	Change gas transporter
RT	Request for test allowable (Include volume requested)

If for any other reason write that reason in this box.
4. The API number of this well
5. The name of the pool for this completion
6. The pool code for this pool
7. The property code for this completion
8. The property name (well name) for this completion
9. The well number for this completion
10. The surface location of this completion NOTE: If the United States government survey designates a Lot Number for this location use that number in the 'UL or lot no.' box. Otherwise use the OCD unit letter.
11. The bottom hole location of this completion
12. Lease code from the following table:

F	Federal
S	State
P	Fee
J	Jicarilla
N	Navajo
U	Ute Mountain Ute
I	Other Indian Tribe
13. The producing method code from the following table:

F	Flowing
P	Pumping or other artificial lift
14. MO/DA/YR that this completion was first connected to a gas transporter
15. The permit number from the District approved C-129 for this completion
16. MO/DA/YR of the C-129 approval for this completion
17. MO/DA/YR of the expiration of C-129 approval for this completion
18. The gas or oil transporter's OGRID number
19. Name and address of the transporter of the product
20. The number assigned to the POD from which this product will be transported by this transporter. If this is a new well or recompletion and this POD has no number the district office will assign a number and write it here.
21. Product code from the following table:

O	Oil
G	Gas
22. The ULSTR location of this POD if it is different from the well completion location and a short description of the POD (Example: "Battery A", "Jones CPD", etc.)
23. The POD number of the storage from which water is moved from this property. If this is a new well or recompletion and this POD has no number the district office will assign a number and write it here.
24. The ULSTR location of this POD if it is different from the well completion location and a short description of the POD (Example: "Battery A Water Tank", "Jones CPD Water Tank", etc.)
25. MO/DA/YR drilling commenced
26. MO/DA/YR this completion was ready to produce
27. Total vertical depth of the well
28. Plugback vertical depth
29. Top and bottom perforation in this completion or casing shoe and TD if openhole
30. Write in 'DHC' if this completion is downhole commingled with another completion, 'DC' if this completion is one of two non-commingled completions in this well bore, or 'MC' if there are more than three non-commingled completions in this well bore.

31. Inside diameter of the well bore
32. Outside diameter of the casing and tubing
33. Depth of casing and tubing. If a casing liner show top and bottom.
34. Number of sacks of cement used per casing string

If the following test data is for an oil well it must be from a test conducted only after the total volume of load oil is recovered.

35. MO/DA/YR that new oil was first produced
36. MO/DA/YR that gas was first produced into a pipeline
37. MO/DA/YR that the following test was completed
38. Length in hours of the test
39. Flowing tubing pressure - oil wells
Shut-in tubing pressure - gas wells
40. Flowing casing pressure - oil wells
Shut-in casing pressure - gas wells
41. Diameter of the choke used in the test
42. Barrels of oil produced during the test
43. Barrels of water produced during the test
44. MCF of gas produced during the test
45. Gas well calculated absolute open flow in MCF/D
46. The method used to test the well:

F	Flowing
P	Pumping
S	Swabbing

If other method please write it in.
47. The signature, printed name, and title of the person authorized to make this report, the date this report was signed, and the telephone number to call for questions about this report
48. The previous operator's name, the signature, printed name, and title of the previous operator's representative authorized to verify that the previous operator no longer operates this completion, and the date this report was signed by that person