

CA 1/25

MERIDIAN OIL

January 25, 1993

Bureau of Land Management
435 Montano Road NE
Albuquerque, NM 87107

Attn: Shirley Mondy

RECEIVED

JAN 27 1993

OIL CO. DIST. 3

well file

RE: Lindrith Unit NP # 68
G Sec 07, T24N, R02W
Bradenhead Gas Flow

Attached are the sundry notices, correspondence, & cased hole logs filed concerning the above well's bradenhead gas flow. Meridian Oil has spoken with Charlie Gholson of the Aztec NMOCD office & Duane Spencer of the Farmington BLM office concerning this well. Due to the responsibility change of this lease to the Rio Puerco BLM office, I am notifying you of Meridian's intent to vent the bradenhead gas to atmosphere. I hope that you will concur with this course of action on the Lindrith Unit NP # 68. Gas volume to be vented will not exceed 5 MCFD. I have summarized the actions & correspondence to date below:

Charlie Gholson contacted MOI in early November 1992 concerning possible gas communication from the Meridian operated Lindrith Unit NP # 68 to a nearby livestock water well owned by Mr. Durham. On Wednesday November 4, 1992 the NMOCD represented by Charlie Gholson & Dianna Fairhurst witnessed the bradenhead tests conducted by Meridian Operations personnel on three (3) Lindrith Unit Pictured Cliffs producers: Lindrith Unit NP # 68, Lindrith Unit # 49, Lindrith Unit # 94. (Attached Test Reports).

The NMOCD concluded that the production casing was NOT in communication with the bradenhead or surrounding formations for each well tested. Due to the location of the Lindrith Unit NP # 68 in relation to the above mentioned water well, Meridian suggested that the casing be tested and cased hole logs run to determine the gas flow source. The two objectives of the operation were to determine if the Pictured Cliffs formation was flowing gas behind the 5-1/2" casing & cement to surface, and second to verify the production casing integrity.

The Lindrith Unit NP # 68 production casing was successfully pressure tested to 700 psi from a depth of 3345' to surface on November 20, 1992. On November 21, 1992 a GR-CBL-CCL was run from 3300' to surface. The log indicated 100% cement bond from 3300' to 2930' with the top of cement (TOC) apparent at 2886'. Additionally 100% cement bond was indicated from 2152' to 2030'. TOC was apparent at 2028'

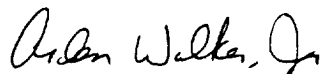
An Audio log was also run from 3300' to surface to identify the source of gas flow. No gas flow was apparent behind the 5-1/2" casing & cement from the Pictured Cliffs formation. The Audio log does indicate the gas flow source to be between 252' and 222', with major gas movement at 232'. This gas source is a shallow sand that is not economically productive. The bradenhead valve was then closed and the Audio log rerun in order to identify potential gas cross-flow above the TOC @ 2028'. No crossflow was observed.

Meridian has returned this well to production. A seven (7) day shut-in casing pressure of four-hundred-sixty-eight (468) psi was measured on December 31, 1992. Current gas production is averaging 17 MCFD. Current shut-in bradenhead pressure is twenty-two (22) psi.

Meridian proposes to vent the bradenhead gas to atmosphere in the hope of draining the surface sand of gas and thereby eliminating future gas production from this interval in surrounding bradenheads. The alternatives to this action were also evaluated. Placing a cement plug to cover this surface gas sand would be imprudent & uneconomical from Meridian Oil's view. First, the gas pressure will not be relieved from this sand and gas may continue to migrate to other nearby wellbores presenting a future bradenhead flow liability. Second, Meridian estimates the cost of placing this cement plug to be \$ 28,000. At current prices & forecasted gas production rates this alternative is not economically feasible. If the BLM does not concur with the Meridian Oil & the NMOCD, there is no other economic alternative than the plugging and abandonment of this well. The result of a plugging decision would be the abandonment of this and many future wells when bradenhead flow is encountered.

I would like to stress that Meridian is continuing to act in a proactive nature on the remediation of all potential liabilities. Meridian's venting to atmosphere of shallow sand gas out the Lindrith Unit NP # 68's bradenhead would set a precedent that may be followed in other areas that pose minimal threat to the environment. Meridian Oil will aggressively pursue all potential liabilities and act in the most prudent & ethical manner.

The NMOCD is in agreement that relieving the pressure from the bradenhead of the Lindrith Unit NP # 68 may reduce/eliminate gas production in the adjacent livestock water well. Meridian estimates the bradenhead flow to the atmosphere at a rate less than 5 MCFD. The attached sundry awaits your approval. If I can provide additional information concerning this proposal, please call at (505) 326-9792. Thank you for your time and consideration.



Arden L. Walker
Regional Production Engineer

TEM:tem
attachments
cc: (without Well Logs)
Charlie Gholson -Aztec NMOCD
Peggy Bradfield
DBV
KFR
Well File



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO GRANOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

RETEST
BRADENHEAD TEST REPORT
(Submit 2 copies to above address)

Date of Test 11/1/92 Operator MERIDIAN OIL, INC.

Lease Name LINDRITH NP Well No. 68 Location U G Sec 7 Twp 24N Range 2W

Pressure (Shut-in or Flowing) Dwt. Tubing - Intermediate NA Casing 360 Bradenhead 20

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH.

TIME: 10:30 AM PRESSURES:

	INTERMEDIATE	CASING
5 Min.		360
10 Min.		360
15 Min.		360
20 Min.		
25 Min.		
30 Min.		

BRADENHEAD
FLOWED:

INTERMEDIATE
FLOWED:

Steady Flow ☒

Surges ☐

Down to Nothing ☐

Nothing ☒

Gas ☒

Gas & Water ☐

Water ☐

If Bradenhead flowed water check description below:

Clear ☐

Fresh ☐

Salty ☐

Sulfur ☐

Black ☐

Remarks:

RECEIVED

NOV 5 1992

OIL CON. DIV

DIST. 3

By

James K. Randall

(Position)

Dianna K. Jaurhust



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

10700 RIO GRANDES ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

RETEST
BRADENHEAD TEST REPORT
(Submit 2 copies to above address)

Date of Test 11/4/92 Operator MERIDIAN OIL, INC

Lease Name LINDRITH Well No. 49 Location U G Sec 9 Twp 24N Range 3W

Pressure (Shut-in or Flowing) Dwt Tubing Intermediate Casing 170 Bradenhead 60

VENT BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH.

TIME: 11:30 A	PRESSURES:	
	INTERMEDIATE	CASING
5 Min.		170
10 Min.		
15 Min.		
20 Min.		
25 Min.		
30 Min.		

	BRADENHEAD FLOWED:	INTERMEDIATE FLOWED:
Steady Flow	<input checked="" type="checkbox"/>	
Surges		
Down to Nothing		
Nothing		
Gas	<input checked="" type="checkbox"/>	
Gas & Water		
Water		

If Bradenhead flowed water check description below:

Clear
Fresh
Salty
Sulfur
Black

RECEIVED
Remarks: NOV 5 1992

WILL CON. 5'

By James K. Randall
(Position)

Sharon K. Joubert

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO GRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

RETEST
BRADENHEAD TEST REPORT
(Submit 2 copies to above address)

Date of Test 11/4/92 Operator MERIDIAN OIL, INC.

Lease Name LINDRITH Well No. 94 Location U G Sec 18 Twp 21N Range 2W

Pressure (Shut-in or Flowing) Dwt Tubing Intermediate Casing 220 Bradenhead 10

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH.

TIME:	INTERMEDIATE	CASING
5 Min.		220
10 "		220
15 Min.		220
20 Min.		
25 Min.		
30 Min.		

	BRADENHEAD FLOWED:	INTERMEDIATE FLOWED:
Steady Flow	<input checked="" type="checkbox"/>	
Light		
Surges		
Down to Nothing		
Nothing		
Gas	<input checked="" type="checkbox"/>	
Gas & Water		
Water		

If Bradenhead flowed water check description below:

Clear
Fresh
Salty
Sulfur
Black

Remarks: **RECEIVED**
NOV 5 1992
OIL CON. DIV
DIST. 3

By James K. Randall
(Position)

Suzanna K. Fairhurst

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well GAS	5. Lease Number SF-078908
2. Name of Operator Meridian Oil Inc.	6. If Indian, All. or Tribe Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	7. Unit Agreement Name Lindrith Unit
4. Location of Well, Footage, Sec., T, R, M 1650'FNL, 1650'FEL Sec.7, T-24-N, R-2-W, NMPM	8. Well Name & Number Lindrith Unit NP #68
	9. API Well No.
	10. Field and Pool S.Blanco PC
	11. County and State Rio Arriba Co, NM

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

Type of Submission	Type of Action	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<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 type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

11-20-92 MOL&RU. Blow down. NU BOP. LD 1" tbg. Ran gge ring & JB to 3380'. Set RBP @ 3345'. Load hole w/wtr. PT csg & BP to 700#.

11-21-92 Ran GR-CBL-CCL 3300-surface'. Ran Audio log 3330-surface. TIH w/retrieving head to 3300'. Unload w/N2. SDFN.

11-22-92 TOOH w/tbg & RBP. TIH w/1" tbg landed @ 3403'. ND BOP. NU WH. Released rig.

4
DEC 1992
PROD. ENGINEERING

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RLM
92 NOV 23 PM 2:33

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

Signed *[Signature]* Title Regulatory Affairs Date 11/23/92

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date DEC 1992

CONDITION OF APPROVAL, if any:

ACCEPTED FOR RECORD

FARMINGTON RESOURCE AREA

BY *[Signature]*

OPERATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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	9. API Well No. 30-039-
	10. Field and Pool S.Blanco PC
	11. County and State Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, 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	<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 type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

The tubing will be pulled from this well, a cement bond log and audio log will be run from PBTD to surface. The tubing will be landed as before and the well returned to production.

4
DEC 1992
PROD. ENGINEERING

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

Signed [Signature] (TEM) Title Regulatory Affairs Date 11/6/92

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____
 CONDITION OF APPROVAL, if any: _____

APPROVED

DEC 11 1992

[Signature]
AREA MANAGER

OPERATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

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<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
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	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other -
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Conversion to Injection

13. Describe Proposed or Completed Operations

Approval is requested for venting to atmosphere of no more than 5 MCFD out the bradenhead valve.

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

Signed [Signature] (TM) Title Regulatory Affairs Date 1/25/93

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any: