

4



HALLADOR PETROLEUM, LLP

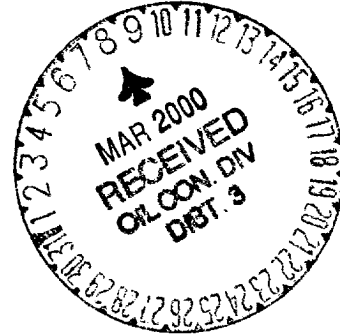
HALLADOR PETROLEUM COMPANY

HALLADOR PRODUCTION COMPANY

March 2, 2000

Oil Conservation Division
Aztec District Office
1000 Rio Brazos Road
Aztec NM 87410

Attention: Mr. Charlie T. Perrin



Re: Horton #12, Sec 27 T32N, R12W, API 30-045-24518

Dear Mr. Perrin:

Hallador Petroleum, LLP, hereby requests the Oil Conservation Division grant an exception to Rule 108 and allow Hallador to continue to produce gas from Pictured Cliffs Formation under the present conditions in the subject well until the economic limit is reached. While we acknowledge the Bradenhead tests indicate a failure, we urge you to consider the following circumstances in making a decision regarding this well.

During the initial well completion and cementing operations (1/2/81), the stage collar failed and closed prematurely. As a result, no cement could be placed above the stage collar. Subsequently, a cement bond log confirmed the top of cement was at a depth of 1890 feet. At time of completion the required top of cement was 1655 feet. In an effort to remedy this situation, a Bradenhead squeeze was performed (4/27/81) to seal off the Ojo Alamo water zone. Our records of Bradenhead tests are as follows:

<u>Date</u>	<u>Comments</u>
4-3-90	no test because stuck valve would not open, pressure on Bradenhead
8-8-93	28# at 15 minutes
7-12-96	26# at 15 minutes
6-9-99	28# at 15 minutes
2-2-00	26# at 15 minutes

There was no change in casing pressure and the well produced at a steady rate during the blow in all of these tests. I have attached copies of the well tests and notices. Horton #12 presently makes about 35 mcfpd or about 1050 mcf per month. Our lease operating expenses run about \$800 per month. We estimate a new set of cased hole logs and a cement squeeze through perforations to cost in the range of \$25,000 to \$30,000.

The above information supports the following conclusions:

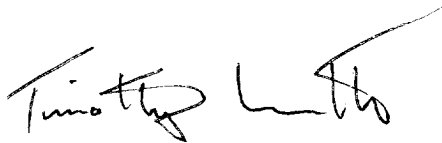
- There is no hole in the 4-1/2" casing.
- The Bradenhead squeeze did not effectively seal the interval up to 1655 feet.
- The source of the gas is the uncemented interval above 1890 feet and not the Pictured Cliffs or Fruitland.

- The pressure condition of the well has not gotten worse, in fact it has not changed.
- Remedial work necessary to come into compliance will take many years to payout. During that time the well will become uneconomic to operate.
- There is no guarantee the remedial work will be successful given that the Bradenhead squeeze failed and possibly impaired our ability to perform an effective squeeze through perforations.

The intent of Rule 108, in part, is to prevent waste. If this well is prematurely abandoned, the next 10 to 15 years of Pictured Cliffs gas production will be lost. Therefore, Hallador would like to propose a monitoring program whereby we conduct a Bradenhead test every six months to provide assurance that the situation is not deteriorating.

As presented above, our appeal is based on economic hardship and the prevention of waste of natural resources. Hallador appreciates your granting us this opportunity to explain the circumstances pertaining to the Horton #12. Please call me at (303) 839-5504 ext. 317 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy Lovseth". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Timothy Lovseth
Manager of Exploration and Geology

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input checked="" type="checkbox"/>	DRY <input type="checkbox"/>	Other _____		
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other _____
2. NAME OF OPERATOR KIMBARK OPERATING CO.						7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 1580 LINCOLN STREET, SUITE 700, DENVER, CO 80203						8. FARM OR LEASE NAME Horton	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1120' FSL & 1120' FWL (SWSW) At top prod. interval reported below At total depth						9. WELL NO. #12	
10. FIELD AND POOL, OR WILDCAT Blanco Pictured Cliffs						11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Section 27, T32N, R12W	
14. PERMIT NO. _____ DATE ISSUED _____						12. COUNTY OR PARISH San Juan	
13. STATE New Mexico						15. DATE SPUDDED 8/12/80	
16. DATE T.D. REACHED 8/16/80						17. DATE COMPL. (Ready to prod.) 1/2/81	
18. ELEVATIONS (DF, REB, RT, GR, ETC.) 6125' KB						19. ELEV. CASINGHEAD	
20. TOTAL DEPTH, MD & TVD 2800'						21. PLUG, BACK T.D., MD & TVD 2650'	
22. IF MULTIPLE COMPL., HOW MANY* _____						23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 2556-2592'. 2533-36'; 2520-24'; 2514-16'; 2502-08'; 2496-2500' Pictured Cliff ELECTRIC AND OTHER LOGS RUN CNL/FDC						25. WAS DIRECTIONAL SURVEY MADE No-	
27. WAS WELL CORED No							

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	210'	12 1/4"	200 SXS	
4 1/2"	10.5#	2790'	7 7/8"	200 SXS	

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	2501'	

31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
2556-2592'; 2533-36'; 2520-24'; 2514-16'; 2502-08'; 2496-2500' with 2 SPF				DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
				Frac'd with 70.500# 10/20 sd with 70 quality foam	
				2556-2592'; 2533-36'; 2520-24'; 2514-16'; 2502-08'; 2496-2500'	

33.* PRODUCTION							
DATE FIRST PRODUCTION 12/28/80		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) SI	
DATE OF TEST 1/1/81	HOURS TESTED 6	CHOKE SIZE 3/4"	PROD'N. FOR TEST PERIOD →	OIL—BBL. →	GAS—MCF. 290	WATER—BBL. -	GAS-OIL RATIO
FLOW. TUBING PRESS. 85	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL. -	GAS—MCF. 1162	WATER—BBL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold						TEST WITNESSED BY H. H. Fellhoelter, Jr.	
35. LIST OF ATTACHMENTS Logs						ACCEPTED FOR RECORD	

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records				FEB 16 1981			
SIGNED C. A. HANSEN		TITLE AGENT		DATE 1/11/81			

*(See Instructions and Spaces for Additional Data on Reverse Side)

FARMINGTON DISTRICT

OPERATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078146A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Horton

9. WELL NO.

12

10. FIELD AND POOL, OR WILDCAT

Blanco Pictured Cliffs

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

Sec. 27: T32N, R12W

12. COUNTY OR PARISH 13. STATE

San Juan New Mexico

1.

OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Kimbark Operating Co.

3. ADDRESS OF OPERATOR

1580 Lincoln St. #700 Denver, CO 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*

See also space 17 below.)
At surface

1120' FSL & 1120' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

6125 KB

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

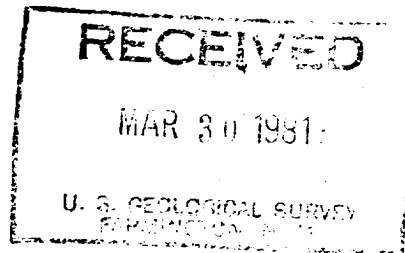
ABANDONMENT*

Top of cement

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

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.)*

The 4½" production casing was cemented with 200 sx of 50/50 poz
By survey the top of cement is 1890' down from surface.



ACCEPTED FOR RECORD

APR 06 1981

FARMINGTON DISTRICT

BY

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

SIGNED

Carson

TITLE

Agent

DATE

3/26/81

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

OPERATOR

*See Instructions on Reverse Side



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 959
Farmington, New Mexico 87401

April 6, 1981



Kimbark Operating Company
1580 Lincoln St., Suite 700
Denver, Colorado 80203

Gentlemen:

Reference is made to your well No. 12 Horton, SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 27, T. 32 N., R. 12 W., San Juan County, New Mexico, lease number Santa Fe 078146-A.

Your Sundry Notice for setting and cementing of 4 $\frac{1}{2}$ " production casing, indicates a cement top of 1890 feet.

As you are aware, this office is concerned with the protection of all fresh water zones, in this case the Ojo Alamo present at 1655 feet, according to our geological review. Please provide this office with a remedial plan for protecting this formation.

Sincerely yours,

James F. Sims
James F. Sims

District Oil and Gas Supervisor

Mv C,

Looks like we will have to squeeze this
RECOMMEND DEFOVATING 431PF @ 1880'
SQUEEZE 100% 50/50 PORT w/ 270 GEL
Should give us CEMENT above 1655'
I will schedule w/ HERMAN.

L.H.E.C

KIMBARK OPERATING COMPANY
KIMBARK COMPANY
KIMBARK ASSOCIATES

KIMBARK
1580 LINCOLN STREET, SUITE 700
DENVER, COLORADO 80203
303-839-5504

WALTER K. ARBUCKLE
GEORGE WALLACE BAYNE
WILLIAM R. THURSTON

April 27, 1981



U.S.G.S.
PO Box 959
Farmington, NM 87401

Re: Kimbark Operating Company
Horton #12
#SF 078146-A

Gentlemen:

Kimbark Operating Company is aware of the problem as set forth in your letter of April 6, 1981 concerning the Ojo Alamo water sand not being covered with cement. This occurred because the DV collar set at 1760' did not function properly therefore no cement was circulated back up past the Ojo Alamo as was originally planned.

To remedy this situation, Kimbark proposes to Braulen head squeeze the 4½" casing annulus with sufficient quantity of cement to reach 1890', which would cover the Ojo Alamo water sand at 1655'.

Kimbark proposes to cover the Ojo Alamo in this manner rather than killing the well, perforating and squeezing the Ojo Alamo for the following reasons:

1. This well will be a substantial producer - IP 1.162 MMCFD. We feel that killing the well to allow squeeze holes to be shot could create permanent and irreversible formation damage.
2. By squeezing you will always have the squeeze perforations exposed, creating the possibility of a casing leak.

Attached for your approval is a completed form 9-331 to cover the above mentioned operation.

Sincerely yours,

C. A. Hansen

C. A. Hansen
Drilling & Production Manager

CAH/nb
enc.

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
Kimbark Operating Company
3. ADDRESS OF OPERATOR
1580 Lincoln St. #700 Denver, CO 80203
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1120' FSL & 1120' 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) cementing 4½" casing

SUBSEQUENT REPORT OF:

- ☐
☐
☐
☐
☐
☐
☐
☐
☒

RECEIVED
APR 27 1981
U.S. GEOLOGICAL SURVEY

5. LEASE

SF 078146A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Horton

9. WELL NO.
12

10. FIELD OR WILDCAT NAME
Blanco

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T32N, R12W

12. COUNTY OR PARISH
San Juan

13. STATE
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6125 KB

(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.)*

Squeeze 8 5/8" x 4½" csg annulus as follows:

1. Rig up & pump sufficient quantity of cement to fill up 4½" csg annulus from surface to 1890' to cover the Ojo Alamo water zone @ 1655'.

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

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

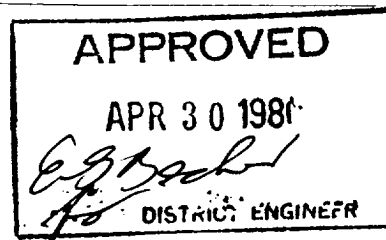
SIGNED Carman TITLE Drlg. & Prod. Mgr. DATE 4/27/81

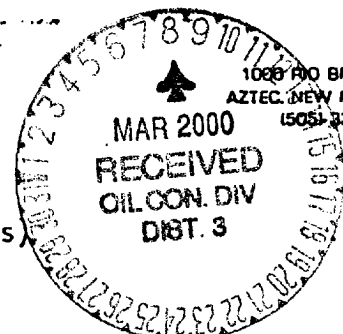
(This space for Federal or State office use)

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

*See Instructions on Reverse Side

OPERATOR



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTOIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICEBRADENHEAD TEST REPORT
(Submit 3 copies to above address)Date of Test 4-3-90 Operator Hallador Petroleum Co.Lease Name Horton Well No. 12 Location U M Sec 27 Twp 32 Range 1Pressure (~~XXXXXXXXXX~~ Flowing) Dwt Tubing 349 Intermediate Casing 362 Bradenhead Rema See

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

TIME:	PRESSURES:	
	INTERMEDIATE	CASING
5 Min.		
10 Min.		
15 Min.		
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: Unable to open Bradenhead Valve.

By

Robert D. Cheneault

Contract Pumper

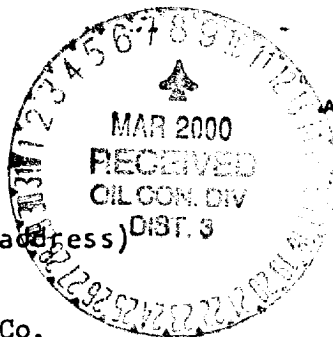
(Position)

Rick: This one has quite a bit
of pressure on IT. UNABLE TO
CHANGE B.H. VALVE.

Bob.



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



1000 RIO BRAZOS RD.
AZTEC, NEW MEXICO 8,
(505) 334-6178

BRADENHEAD TEST REPORT
(Submit 3 copies to above address)

Date of Test 7-12-93 Operator Hallador Petroleum Co.

Lease Name Horton Well No. 12 Location U M Sec 27 Twp 32 Range 2

Pressure ~~XXXXXX~~ Flowing) Dwt Tubing 316 Intermediate Casing 340 Bradenhead See
Remarks

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

TIME:	PRESSURES:		BRADENHEAD FLOWED:	INTERMEDIATE FLOWED:
	INTERMEDIATE	CASING		
5 Min.	<u> </u>	<u> </u>	Steady Flow <u> </u>	<u> </u>
10 Min.	<u> </u>	<u> </u>	Surges <u> </u>	<u> </u>
15 Min.	<u> </u>	<u> </u>	Down to Nothing <u> </u>	<u> </u>
20 Min.	<u> </u>	<u> </u>	Nothing <u> </u>	<u> </u>
25 Min.	<u> </u>	<u> </u>	Gas <u> </u>	<u> </u>
30 Min.	<u> </u>	<u> </u>	Gas & Water <u> </u>	<u> </u>
			Water <u> </u>	<u> </u>

If Bradenhead flowed water check description below:

Clear
Fresh
Salty
Sulfur
Black

Remarks: Unable to open braden-head valve.
Tried to unscrew and replace, but had to
much pressure.

By Robert D. Chenevix
Contract Pumper
(Position)

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (4-11 logs available) will be provided.

tion and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

item 7: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22 and in item 24 above. Attachments on intervals completed for separate production from more than one interval zone (multiple completion) for depth measurements given in other spaces on this form and in any attachments.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the additional supplemental interval to be separately produced, showing the additional data pertinent to such interval.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

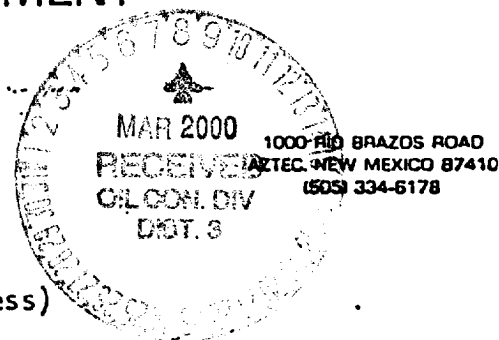
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

★ GPO 762-929



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE



BRADENHEAD TEST REPORT
(Submit 3 copies to above address)

Date of Test 8-8-93 Operator Hallador Petroleum Co.

Lease Name Horton Well No. 12 Location U M Sec 27 Twp 32 Range 12

Pressure (~~XXXXXX~~ Flowing) Dwt Tubing 302 Intermediate Casing 336 Bradenhead 58

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

TIME:	PRESSURES:		BRADENHEAD FLOWED:	INTERMEDIATE FLOWED:
	INTERMEDIATE	CASING		
5 Min.		336	Steady Flow <u>XX</u>	
10 Min.		336	Surges <u> </u>	
15 Min.		336	Down to Nothing <u> </u>	
20 Min.			Nothing <u> </u>	
25 Min.			Gas <u>XX</u>	
30 Min.			Gas & Water <u> </u>	
			Water <u> </u>	

If Bradenhead flowed water check description below:

Clear
Fresh
Salty
Sulfur
Black

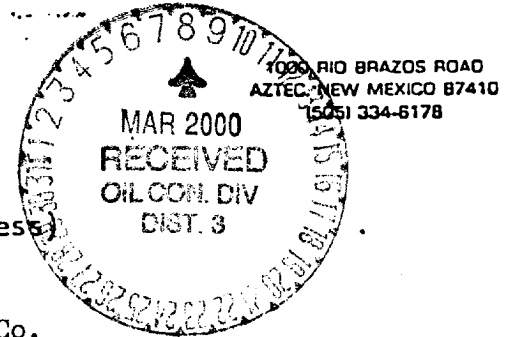
Remarks: Removed bad Bradenhead valve
8-5-93. Installed new 2" Brass Valve
& Ran another B.H. Test 8-8-93.
Blew Braden Head Valve For 15 min.

@ 5 min. 50# Pressure
@ 10 min. 42# Pressure
@ 15 min. 28# Pressure

By Robert D. Cheneau
Contract Pumper
(Position)



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



BRADENHEAD TEST REPORT
(Submit 3 copies to above address)

Date of Test 7-12-96 Operator Hallador Petroleum Co.

Lease Name Horton Well No. 12 Location U M Sec 27 Twp 32 Range 12

Pressure ~~XXXXXXXXXX~~ Flowing) Dwt Tubing 234 Intermediate Casing 260 Bradenhead 55

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

TIME:	PRESSURE3:	
	INTERMEDIATE	CASING
5 Min.		260
10 Min.		260
15 Min.		260
20 Min.		
25 Min.		
30 Min.		

BRADENHEAD FLOWED:		INTERMEDIATE FLOWED:
Steady Flow <u>XX</u>		
Surges <u> </u>		
Down to Nothing <u> </u>		
Nothing <u> </u>		
Gas <u>XX</u>		
Gas & Water <u> </u>		
Water <u> </u>		

if Bradenhead flowed water check description below:

Clear
Fresh
Salty
Sulfur
Black

Remarks: Blew Bradenhead Valve 15 mins.
@ 5 min. 48# Pressure
@ 10 min. 40# Pressure
@ 15 min. 26# Pressure

By Robert O. Chavala
Contract Pumper
(Position)



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

AZTEC DISTRICT OFFICE

1988 RSO BRAZOS ROAD

AZTEC NM 87410

PHONE 334-6178 FAX (505) 334-6179

http://www.oilconservation.state.nm.us/ocd/District/MSD/aztec.htm

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)



Date of Test 6-11-99 Operator Hallador Petroleum Co API #30-0

Property Name Horton Well No. 12 Location: Unit M Section 27 Township 32N Range 12W

Pressure (Shut-In or Producing) _____ Tubing 292 Intermediate N/A Casing 302 Bradenhead 59

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES:		BRADENHEAD FLOWED	INTERMEDIATE FLOWED
	INTERMEDIATE	CASING		
5 minutes		302	Steady Flow <u>XX</u>	
10 minutes		302	Surges _____	
15 minutes		302	Down to Nothing _____	
20 minutes		302	Nothing _____	
25 minutes			Gas <u>XX</u>	
30 minutes			Gas & Water _____	
			Water _____	

If bradenhead flowed water, check all of the descriptions that apply below.

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

REMARKS:

Blew Bradenhead for 20 minutes

@ 5. min. 51# pressure

@ 10 min. 40# pressure

@ 15 min. 28# pressure @ 20 min. 21# pressure

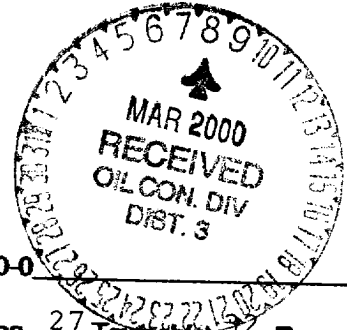
By Robert G. Chenault Witness _____
Chenault Consulting Inc.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1886 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6179
<http://www.state.nm.us/ocd/District/NM3District.htm>

BRADENHEAD TEST REPORT
(Submit 2 copies to above address)



Date of Test 2-2-00 Operator Hallador Pet. Co. API #30-0
Property Name Horton Well No. 12 Location: Unit M Section 27 Township 92 Range 12W
Pressure (Static or Producing) 255 Tubing 255 Intermediate 0 Casing 270 Bradenhead 60

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES:		BRADENHEAD FLOWED	INTERMEDIATE FLOWED
	INTERMEDIATE	CASING		
5 minutes		270	Steady Flow <u>XX</u>	
10 minutes		270	Surges	
15 minutes		270	Down to Nothing	
20 minutes		270	Nothing	
25 minutes		270	Gas <u>XX</u>	
30 minutes		270	Gas & Water	
			Water	

If bradenhead flowed water, check all of the descriptions that apply below.

CLEAR FRESH SALTY SULFUR BLACK

REMARKS:

Blew Bradenhead for 30 mins. through a 2" valve.

Blew Down To 26 lbs. Shut off & checked pressure after 5 mins. Pressure was 44 lbs.

Well Producing Steady rate during 30 min. blow.

By Robert G. Chenault

Witness

Chenault Consulting, Inc.