

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: Hallwood Petroleum, Inc. P. O. Box 378111 Denver, CO 80237 (303) 850-7373		OGRID Number 009812
		API Number 30-025-34383
Property Code 15330	Property Name Bass	Well No. 4

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	30	20S	33E		1700	North	1815	East	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
(straight hole - N/A)									
Proposed Pool 1 Hat Mesa - Delaware					Proposed Pool 2				

Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3584'
Multiple No	Proposed Depth 8300'	Formation Delaware	Contractor Patterson Drlg	Spud Date 8/15/94

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17.50"	13 3/8" K-55	54.50#	1200'	1000 sxs	surface
12.25"	8 5/8" K-55	24 x 32#	3100'	1250 sxs	surface
7.875"	5 1/2" N-80	15.5 x 17#	8300'	1st 450 sxs	3000'
	& J-55			3rd 540 sxs	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Hallwood Petroleum, Inc. proposes to drill this well with conventional rotary tools and mud systems to 8300'. Surface and intermediate (8 5/8") casing will be cemented to surface. The production casing will be 2-stage cemented back to approximately 3000'. The well will be perforated and fracture stimulated in the Upper and Lower Delaware zones and put on conventional beam pump. See attached plats and supporting information. Lease is ST NML 9073. Permit Expires 1 Year From Approval Date Unless Drilling Underway
A 3000 psi BOP system will be utilized below 3100'.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Kevin E. O'Connell</i>		OIL CONSERVATION DIVISION	
Printed name: Kevin E. O'Connell		Approved by: ORIGINAL SIGNED BY CHRIS WILLIAMS	
Title: Drilling & Production Mgr		Title: DISTRICT SUPERVISOR	
Date: 4/23/98		Approval Date: APR 30 1998	Expiration Date:
Phone: (303) 850-6303		Conditions of Approval: Attached <input type="checkbox"/>	

C-101 Instructions

Measurements and dimensions are to be in feet/inches. Well locations will refer to the New Mexico Principal Meridian.

IF THIS IS AN AMENDED REPORT CHECK THE BOX LABLED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

18 Geologic formation at TD

19 Name of the intended drilling company if known.

20 Anticipated spud date.

21 Proposed hole size ID inches, proposed casing OD inches, casing weight in pounds per foot, setting depth of the casing or depth and top of liner, proposed cementing volume, and estimated top of cement

22 Brief description of the proposed drilling program and BOP program. Attach additional sheets if necessary.

23 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.

1 Operator's OGRID number. If you do not have one it will be assigned and filled in by the District office.

2 Operator's name and address

3 API number of this well. If this is a new drill the OCD will assign the number and fill this in.

4 Property code. If this is a new property the OCD will assign the number and fill it in.

5 Property name that used to be called 'well name'

6 The number of this well on the property.

7 The surveyed location of this well New Mexico Principal Meridian 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.

8 The proposed bottom hole location of this well at TD

9 and 10 The proposed pool(s) to which this well is being drilled.

11 Work type code from the following table:

N New well
E Re-entry
D Drill deeper
P Plugback
A Add a zone

12 Well type code from the following table:

O Single oil completion
G Single gas completion
M Multiple completion
I Injection well
S SWD well
W Water supply well
C Carbon dioxide well

13 Cable or rotary drilling code

C Propose to cable tool drill
R Propose to rotary drill

14 Lease type code from the following table:

F Federal
S State
P Private
N Navajo
J Jicarilla
U Ute
I Other Indian tribe

15 Ground level elevation above sea level

16 Intend to multiple complete? Yes or No

17 Proposed total depth of this well

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
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Form C-102
Revised February 10, 1994
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State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34383		Pool Code 30214	Pool Name Hat Mesa - Delaware
Property Code 15330	Property Name BASS		Well Number 4
OGRID No. 009812	Operator Name HALLWOOD PETROLEUM, INC.		Elevation 3584.

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
G	30	20-S	33-E		1700	NORTH	1815	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

(straight hole - N/A)

12 Dedicated Acres 10	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>16</p> <p>ACREAGE TO BE ATTRIBUTED SW 1/4 OF NE 1/4 ± 40 ACRES</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Kevin E. O'Connell</i> Signature Kevin E. O'Connell Printed Name Drilling & Production Mgr Title April 23, 1998 Date</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was placed from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>APR 21 1998 Date of Survey NEW MEXICO Signature of Registered Professional Surveyor 5412 REGISTERED LAND SURVEYOR ENGINEER PROFESSIONAL NM PE&PS NO. 5412</p>

New Mexico Oil Conservation Division
C-102 Instructions

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

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the appropriate OCD district office. Independent subdivision surveys will not be acceptable.

1. The OCD assigned API number for this well
2. The pool code for this (proposed) completion
3. The pool name for this (proposed) completion
4. The property code for this (proposed) completion
5. The property name (well name) for this (proposed) completion
6. The well number for this (proposed) completion
7. Operator's OGRID number
8. The operator's name
9. The ground level elevation of this well
10. The surveyed surface location of this well measured from the section lines. 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. Proposed bottom hole location. If this is a horizontal hole indicate the location of the end of the hole.
12. The calculated acreage dedicated to this completion to the nearest hundredth of an acre
13. Put a Y if more than one completion will be sharing this same acreage or N if this is the only completion on this acreage
14. If more than one lease of different ownership has been dedicated to the well show the consolidation code from the following table:

C	Communitization
U	Unitization
F	Forced pooling
O	Other
P	Consolidation pending

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION!

15. Write in the OCD order(s) approving a non-standard location, non-standard spacing, or directional or horizontal drilling

16. This grid represents a standard section. You may superimpose a non-standard section over this grid. Outline the dedicated acreage and the separate leases within that dedicated acreage. Show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. (Note: A legal location is determined from the perpendicular distance to the edge of the tract.) If this is a high angle or horizontal hole show that portion of the well bore that is open within this pool.

Show all lots, lot numbers, and their respective acreage.

If more than one lease has been dedicated to this completion, outline each one and identify the ownership as to both working interest and royalty.

17. The signature, printed name, and title of the person authorized to make this report, and the date this document was signed.
18. The registered surveyors certification. This section does not have to be completed if this form has been previously accepted by the OCD and is being filed for a change of pool or dedicated acreage.



RECEIVED
APR 20 1998
LAND

April 16, 1998

Hallwood Petroleum, Inc.
P.O. Box 378111
Denver, CO 80237

Attention: Ms. Robin Benko, Landman

Re: Bass #4 Well
Section 30, T-20-S, R-33-E
1700' FNL x 1815' FEL
Lea County, New Mexico

Dear Robin:

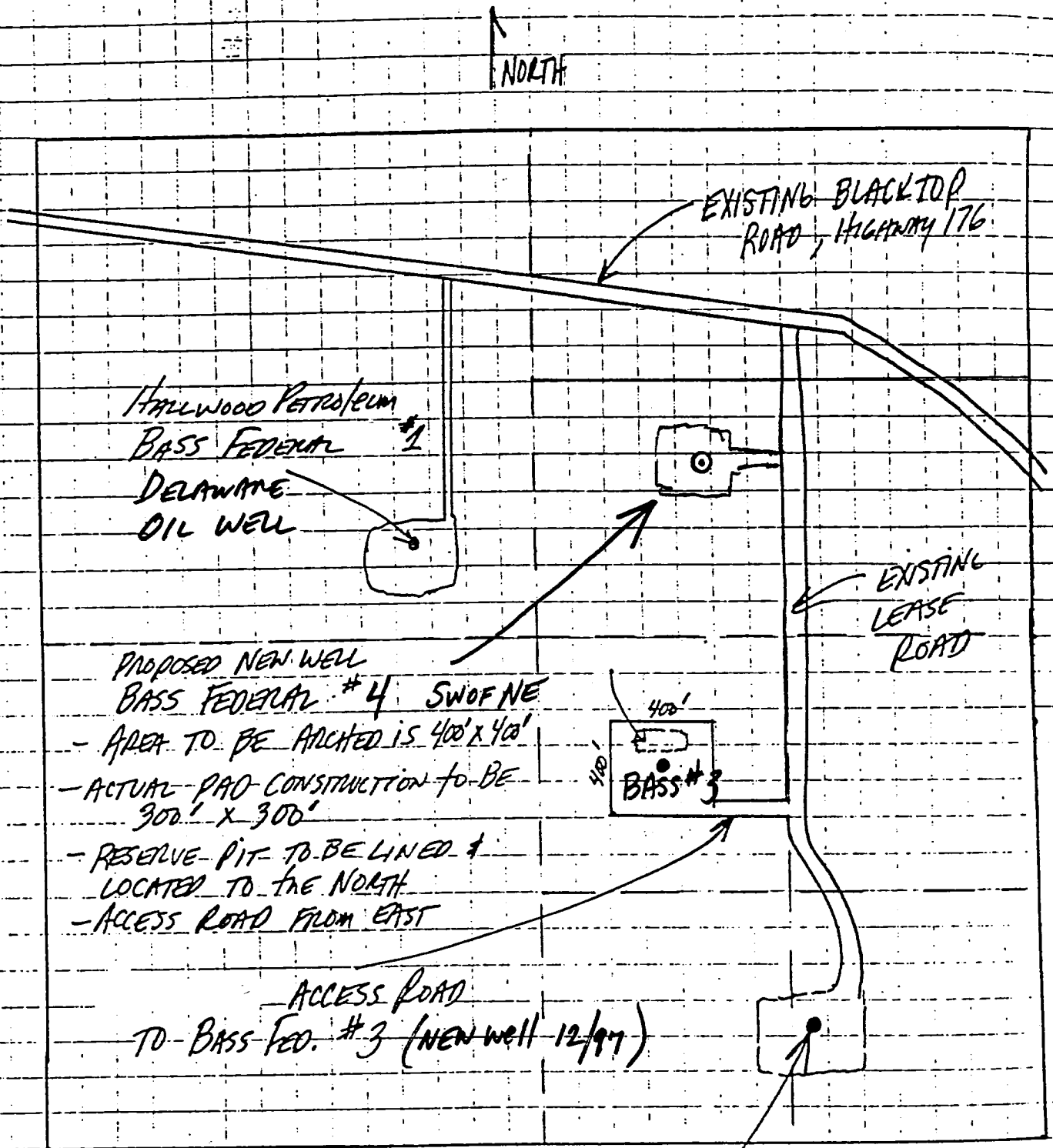
In accordance with the State of New Mexico, Energy, Minerals and Natural Resources Department Oil Conservation Commission Order R-111-P, Mississippi Potash, Inc. offers no objection to the drilling of the proposed Bass #4 Well by Hallwood Petroleum, Inc.

Sincerely,

Jill Farnsworth
Chief Mine Engineer

Cc: Mr. Chris Williams
District Supervisor
Oil Conservation Division
1000 W. Broadway
Hobbs, NM 88240

Ms. Kathleen Garland
Acting Director
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505



HALLWOOD PET. INC. - BASS FEDERAL #2, DELAWARE OIL WELL

Hallwood
Energy
Companies

Subject BASS # 4

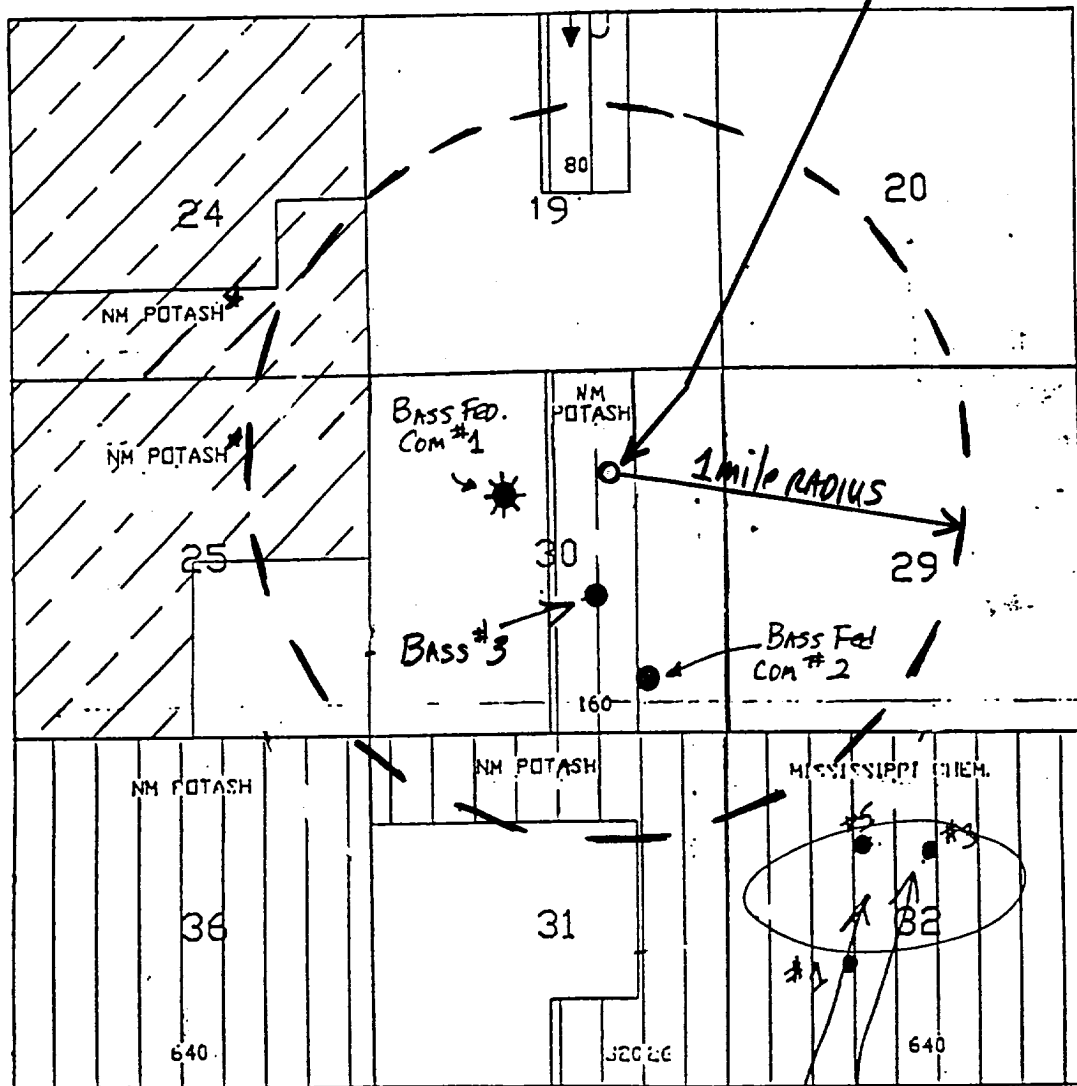
SW of NE, SECTION 30 - T20S - R33E, LEACo, NM

Date 4-23-98 By K.P. O'Connell Page _____

- SHADED AREAS REPRESENT POTASH LEASES

★ Mississippi Potash, Inc is the
Successor to New Mexico Potash.

BASS #4
PROPOSED WELL LOCATION
1700' FNL X 1815' FEL

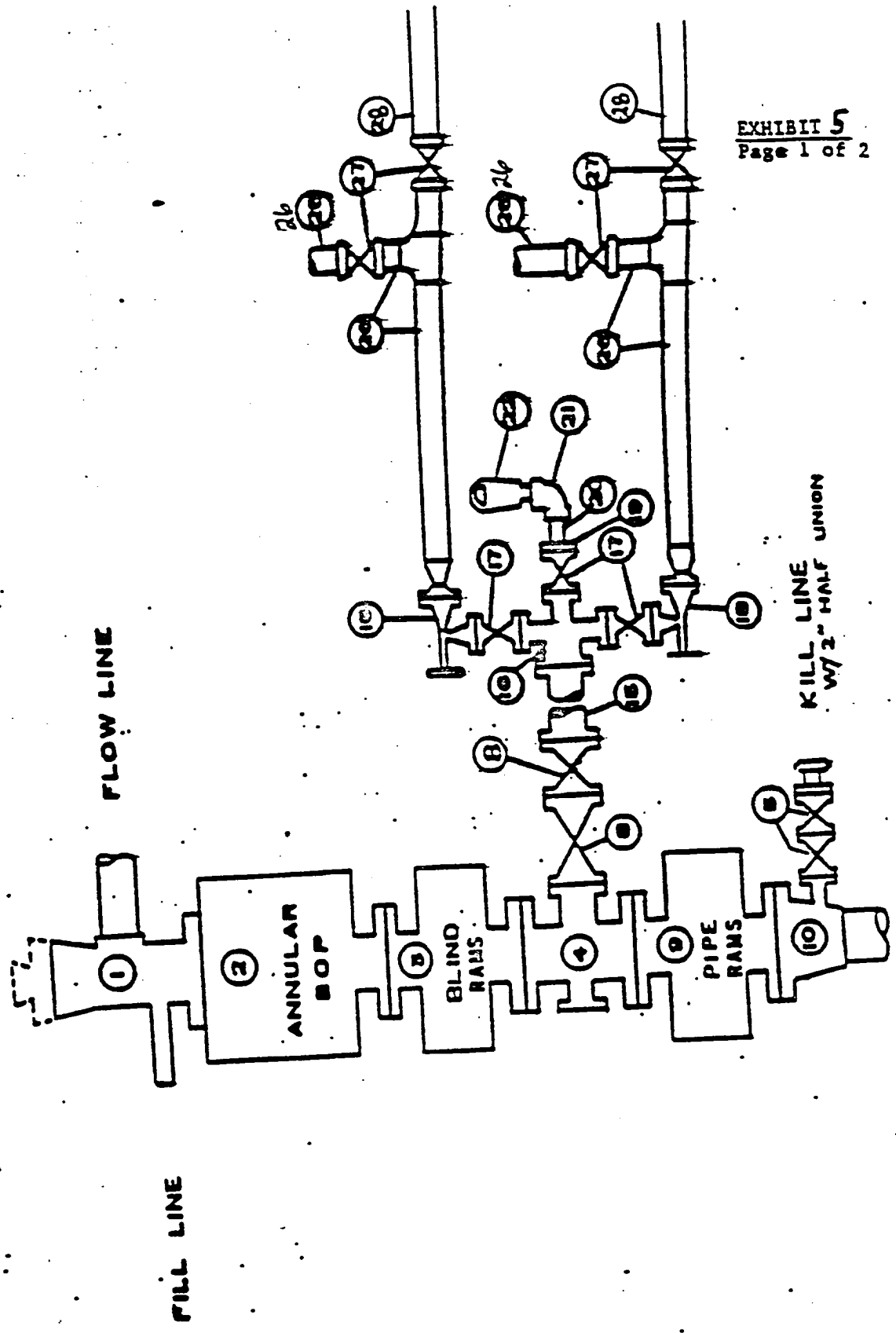


R32E

R33E

RECENT MERIDIAN WELLS
DRILLED IN SEC. 32
HAT MESA STATE WELLS

**TYPE 2-BLOWOUT PREVENTER SPECIFICATIONS
3M & 5M WORKING PRESSURE**



**BLOWOUT PREVENTER SPECIFICATION
EQUIPMENT DESCRIPTION**

**TYPE 2
3,000 AND 5,000 PSI WORKING PRESSURE**

All equipment shall be at least minimum stack WP or higher unless otherwise specified.

1. Bell nipple or rotating head.
2. Hydril or Shaffer and Cameron Annular bag type preventer.
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 4-inch and one 2-inch (minimum) outlet.
5. 2-inch (minimum) flanged plug or gate valve.
- 6.
- 7.
8. 4-inch flanged gate or plug valve.
9. Ram type pressure operated blowout preventer with pipe rams.
10. Flanged type casing head with one side outlet (furnished by operator).
- 11.
- 12.
- 13.
- 14.
15. 4-inch flanged spacer spool.
16. 4-inch by 2-inch by 2-inch by 2-inch flanged cross.
17. 2-inch flanged plug or gate valve.
18. 2-inch flanged adjustable choke.
19. 2-inch threaded flange.
20. 2-inch XXH nipple.
21. 2-inch forged steel 90° Ell.
22. Cameron (or equal) threaded pressure gage.
- 23.
- 24.
- 25.
26. 2-1/2-inch pipe, 300' to pit, anchored.
27. 2-1/2-inch valve.
28. 2-1/2-inch line to steel pit or separator.

NOTES:

1. Items 3, 4, and 9 may be replaced with double ram type preventer with side outlets between the rams.
2. The two valves next to the stack on kill line to be closed unless drill string is being pulled.
3. Kill line is for emergency use only. This connection shall not be used for filling.
4. Replacement pipe rams and blind rams shall be on location at all times.
5. Only type U, LWS, and ORC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.
7. Kelly will be equipped with upper kelly cock valve. Safety valve (stabbing) and handles for kelly cock and safety valve will be on rig floor. Handling subs for each type of pipe will be located on rig floor.

HALLWOOD DRILLING PROGNOSIS

OPERATOR: Hallwood Petroleum, Inc.	DATE: 4/22/98
WELL NAME: Bass #4	PREPARED BY: KEO
LOCATION: SW of NE/4 Section 30-T20S-R33E (660' ENL x 1980' FEL) 1700' ENL x 1815' FEL	
COUNTY: Lea	STATE: NM

DRILLING PROGRAM

CASING/ TUBING	FROM	TO	SIZE	WEIGHT	GRADE	CPLG	HOLE SIZE
Surface	0	1200'	13 3/8"	54.5#	K-55	STXC	17 1/2"
Inter.	0	3100'	8 5/8"	24 x 32#	K-55	LTXC	12 1/4"
Production	0	8300'	5 1/2"	15.5 x 17#	N-80	LTXC	7 7/8"
					J-55		

MUD PROGRAM

TYPE	DEPTH	RHEOLOGY	WT	VIS	WL
Native	0-1200'		8.4 - 8.6	34-36	NC
Brine Water	1200-3100'		10.0 - 10.1	28-29	NC
Cut Brine Wtr	3100-8300'		9.0 - 9.2	28-40	20-30
			After 6000'		Below 10

CEMENT PROGRAM

INTERVAL STAGE	EST. SLURRY VOLUME	SLURRY CHARACTERISTICS	EQUIPMENT: DV, SCRATCHER, CENTRALIZERS, SHOE, ETC.
Surface	1600 cu ft	900 sxs lead & 100 sxs neat tail	6 centralizers
Intermediate	1920 cu ft	1100 sxs lead & 150 sxs neat tail	10-12 centralizers
Production	1346 cu ft cmt to 2900'	1 st : 450 sxs neat 2 nd : 440 sxs lead, 100 sxs neat tail	Turbulators & centralizers

BIT PROGRAM

Detailed program to follow.

DRILLING HAZARDS/PRODUCTION PROBLEMS

None anticipated

DEVIATION SURVEYS/PRODUCTION PROBLEMS

Possible deviation problems 2000-4000'.

WELLHEAD

3000 psi equipment required.

SPECIAL EQUIPMENT

None

SPECIAL PERSONNEL REQUIREMENTS

None

Cementing Notes:

- On surface hole use 100% excess cement (or run fluid caliper).
- On intermediate hole use 50% excess cement.
- On production hole, assumed DV tool at 6000'.
First Stage - Cement use 35% excess and all neat cement.
Second Stage - Use 50% excess, tail in with 100 sxs of neat, top of cement designed for 2900'.

HALLWOOD GEOLOGICAL PROGNOSIS

DATE: 1/28/98 4/22/98	TYPE WELL: Development
WELL NAME: Bass #4	FIELD/LEASE: Hat Mesa Field
LOCATION: SW NE Section 30-T20S-R33E (660' FNL x 1980' FEL) 1700' FNL x 1815' FEL	
COUNTY: Lea	STATE: NM
ELEVATION: GR 2594' (est) KB 3610' (est)	TIGHT HOLE:
3584' Actual	

FORMATION	DEPTH	DATUM	REMARKS
Upper Delaware	6900'	(-3290)	Upper zone of interest
Lower Delaware	7900'	(-4290)	Lower zones of interest - Top
Lower Delaware	8100'	(-4490)	Lower zones of interest - Bottom

TOTAL DEPTH

8300'

SAMPLES

30' samples from 3000' - 6000'
10' samples from 6000' - TD

TESTING/CORING

None planned

LOGGING PROGRAM

Dual Induction/Laterolog/SP/GR/ from TD to 3000'
Spectral Density/CNL/GR from TD to 3000' (minimum)

WELLSITE GEOLOGIST/MUDLOGGER

One man Mud Log Unit on location from 6000' to total depth.

REMARKS

NAME	POSITION	MOBILE PHONE	HOME PHONE	OFFICE PHONE
Kevin O'Connell	Drig & Prod Mgr	N/A	(303) 838-2191	(303) 850-6303
Jim Bonaventura	Area Superintendent	(970) 749-0571	(970) 247-9662	(970) 259-1374
Doug Little	Prod. Foreman	(505) 390-6197	(505) 887-1393	(505) 885-8764
HPI Fax Machines				(303) 850-6530 (logs)
				(303) 850-6290 (morning reports & mud logger reports)