

## District I

1625 N. French Dr., Hobbs, NM 88240

## District II

1301 W. Grand Avenue, Artesia, NM 88210

## District III

1000 Rio Brazos Road, Aztec, NM 87410

## District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

RECEIVED

Form C-101

May 27, 2004

Oil Conservation Division SEP 15 2005

1220 South St. Francis Dr. COO-ARTEDIA

Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address Bass Enterprises Production Co. P. O. Box 2760 Midland, TX 79702		<sup>2</sup> OGRID Number 001801
<sup>3</sup> Property Code 35100	<sup>4</sup> Property Name HORNED TOAD 36 STATE	<sup>5</sup> API Number 30-015-34347
<sup>9</sup> Proposed Pool 1 CANYON, DELAWARE NW 96464		<sup>6</sup> Well No. 7
<sup>10</sup> Proposed Pool 2		

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
G	36	24S	29E		1880	NORTH	1880	EAST	EDDY

<sup>8</sup> 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/Westline	County

## Additional Well Information

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3098' GL
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 7500'	<sup>18</sup> Formation DELAWARE	<sup>19</sup> Contractor ADOBE DRILLING	<sup>20</sup> Spud Date 11/01/2005
Depth to Groundwater 150'		Distance from nearest fresh water well 2-1/2 miles		Distance from nearest surface water 6 miles
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mil thick Clay <input type="checkbox"/> Pit Volume: 11500 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input checked="" type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
14-3/4"	11-3/4"	42#	970'	580	SURFACE*
11"	8-5/8"	32#	3290'	976	1000'
7-7/8"	5-1/2"	15.5 & 17#	7500'	722	2990'

<sup>22</sup> 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.

SURFACE IS OWNED BY THE STATE OF NEW MEXICO. ATTACHED IS A DRILLING PROGNOSIS AND A BOP DIAGRAM.

\*Bass proposes to drill 10' into the salt section to insure all zones above the salt are penetrated. The casing will be set 10'-20' above the total depth and cemented to surface.

\* \*This intermediate casing is a contingency string to be installed only if we encounter "free flowing sand" as was found in our Poker Lake Unit #217 located in section 19, T24S, R30E. In Poker Lake Unit #217 this sand occurred at several depths (+ 1500', + 1800', + 1950', + 2300') and we were only able to control it by "Mudding Up" with a high vis drilling fluid which with the resultant mud weight exceeded the low frac gradient in the Delaware Lower Brushy Canyon Sands. Therefore, the 11" casing is proposed in order to put this problem behind pipe and thereby allow for the drilling of the Delaware Sands with a fresh water low weight drilling fluid. If the flowing sand problem is not encountered the intermediate casing will not be run. Hole size will be reduced to 7-7/8" and the production hole drilled with a brine water/diesel emulsion mud. This drilling fluid has been used successfully by Bass in the (Nash Draw) Delaware Field.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

OIL CONSERVATION DIVISION	
Approved by	TIM W. GUM
DISTRICT II SUPERVISOR	
Printed name: Cindi Goodman	Title:
Title: Production Clerk	Approval Date: SEP 21 2005 Expiration Date: SEP 21 2006
E-mail Address: cdgoodman@basspet.com	
Date: 09/13/2005	Phone: (432)683-2277
Conditions of Approval Attached <input type="checkbox"/>	

Salt  
29.5

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DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96464	Pool Name Coral Canyon DELAWARE, NW
Property Code	Property Name HORND TOAD "36" STATE	Well Number 7
OGRID No. 001801	Operator Name BASS ENTERPRISES PRODUCTION COMPANY	Elevation 3098'

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	36	24 S	29 E		1880	NORTH	1880	EAST	EDDY

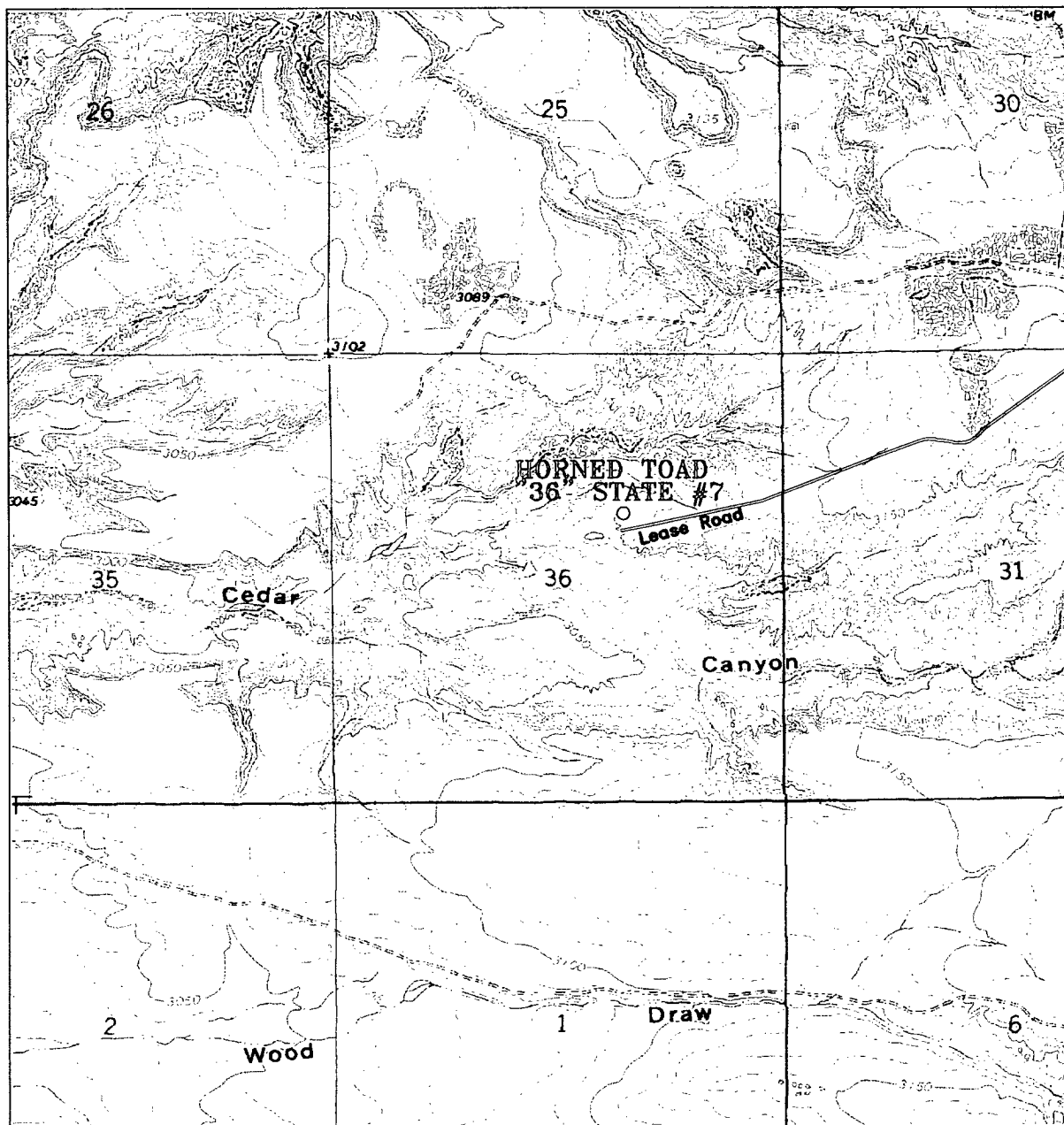
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill N	Consolidation Code	Order No.						

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

	<b>OPERATOR CERTIFICATION</b>  <i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature: <u>W.R. Dannels</u> Printed Name: <u>W.R. DANNELS</u> Title: <u>DIVISION DRILLING SUPT.</u> Date: <u>9/13/2005</u>
	<b>SURVEYOR CERTIFICATION</b>  <i>I hereby certify that the well location shown on this plat was plotted 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.</i>  AUGUST 12, 2005  Date Surveyed: _____ Signature & Seal of Professional Surveyor: <u>[Signature]</u> W.O. No. <u>5718</u> Certificate No. <u>Gary L. Jones</u> 7977 BASIN SURVEYS





**HORNE TOAD "36" STATE #7**  
 Located at 1880' FNL and 1880' FEL  
 Section 36, Township 24 South, Range 29 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 5710AA - KJG #7

Survey Date: 08-12-2005

Scale: 1" = 2000'

Date: 08-16-2005

**BASS ENTERPRISES  
 PRODUCTION CO.**



**EIGHT POINT DRILLING PROGRAM  
BASS ENTERPRISES PRODUCTION CO.**

**NAME OF WELL: HORNED TOAD 36 STATE #7**

**LEGAL DESCRIPTION - SURFACE: 1880' FNL & 1880' FEL, Section 36, T-24-S, R-29-E, Eddy County, New Mexico.**

**POINT 1: ESTIMATED FORMATION TOPS**

(See No. 2 Below)

**POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS**

Anticipated Formation Tops: KB 3115' (est)  
GL 3098'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Salt	977'	+ 2,138'	Barren
T/Lamar	3,276'	- 161'	Barren
T/Lwr Brushy Canyon	6,857'	- 3,742'	Oil/Gas
TD	7,500'	- 4,380'	

**POINT 3: CASING PROGRAM**

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16"	0' - 60'	Conductor	Contractor Discretion
11-3/4", 42#, J-55, ST&C	0' - 970'	Surface	New
8-5/8", 32#, J-55, LT&C	0' - 3,290'	Intermediate	New
5-1/2", 15.50#, K-55, LT&C	0' - 6,300'	Production	New
5-1/2", 17#, K-55, LT&C	6,300' - 7,500'	Production	New

**POINT 4: PRESSURE CONTROL EQUIPMENT**

A BOPE consistant with API RP-53 will be nipped up on the surface casing head. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casing head will be hydro-tested to 70% of internal yield pressure of casing or 1000 psig whichever is less with the rig pump. The BOPE when rigged up on the intermediate casing spool will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (200 psig) test will be required. These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

**POINT 5: MUD PROGRAM**

<u>DEPTH</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0' – 977'	FW Spud Mud	8.5 - 9.2	45-35	NC	NC	NC	10.0
800' – 3290'	BW	10.0	28-30	NC	NC	NC	9.5-10.5
3290' – 6000'	Fresh Water	8.4 - 8.9	28-30	NC	NC	NC	9.5-10.5
6000' – 6900'	FW/Starch	8.7 - 8.9	30-35	4	8	<100	9.5-10.5
6900' – 7500'	FW/Starch/Gel	8.7 - 8.9	40-45	4	8	<25	9.5-10.5

*\*Will increase vis for logging purposes only.*

**POINT 6: TECHNICAL STAGES OF OPERATION****A) TESTING**

None anticipated.

**B) LOGGING**

GR-CNL-LDT-LLD from TD to Base of Salt (+/-3,322'). Run GR-CNL from Base of Salt to surface.

**C) CONVENTIONAL CORING**

None anticipated.

**D) CEMENT**

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT<sup>3</sup>/SX</u>	
<u>SURFACE:</u> Circulate cement to surface.							
Lead 0'-500' (100% excess)	228	500	Permian Basin Critical Zone	10.40	12.8	1.90	
Tail 500' – 970' (100% excess)	350	470	Premium Plus+2% CaCl <sub>2</sub> 1/2# Flocele	6.33	14.8	1.35	
<u>INTERMEDIATE:</u>							
Lead 1000'-2790' (200% excess)	600	1790	Interfill C+0.3% Halad R-322	14.11	11.9	2.45	
Tail 2790' – 3290' (200% excess)	376	500	Premium Plus+2% CaCl <sub>2</sub>	6.33	14.8	1.35	
<u>PRODUCTION:</u>							
Lead 3240'-7500' (50% excess)	722	4260	Premium Plus + 1% Zone Sealant 2000	6.32	11.9	1.65	<u>COMPRESSIVE</u> Nitrogen 300/600 scf/bbl Strength 1200

**E) DIRECTIONAL DRILLING**

No directional services anticipated.

**POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout Delaware section. A BHP of 3483 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware section from 3,290'-7,500'. No H<sub>2</sub>S is anticipated.

Estimated BHT is 140° F.

**POINT 8: OTHER PERTINENT INFORMATION****A) Auxiliary Equipment**

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

**B) Anticipated Starting Date**

Upon approval

12 days drilling operations

14 days completion operations

LHS/cdg