

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

NOTIFY OCD OF SPUD &  
TIME TO WITNESS  
CEMENTING OF SURFACE &  
INTERMEDIATE CASING

Form C-101  
May 27, 2004

Sources

RECEIVED

Submit to appropriate District Office

1 JAN 14 2006

OCD-ANTFOM

☐ 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, Texas 79702		<sup>2</sup> OGRID Number 001801
<sup>3</sup> Property Code 18409	<sup>5</sup> Property Name Remuda Basin 24 State	<sup>4</sup> API Number 30-013-34634
<sup>9</sup> Proposed Pool 1 Nash Draw (Delaware) / Bone Spring (Avalon Sand) 47545		<sup>6</sup> Well No. 5
<sup>10</sup> Proposed Pool 2		

<sup>7</sup> Surface Location									
UL of lot no. H	Section 24	Township 23S	Range 29E	Lot Idn	Feet from the 1730	North/South line North	Feet from the 860	East/Westline East	County 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 R	<sup>15</sup> Ground Level Elevation 3018'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 7500'	<sup>18</sup> Formation Delaware	<sup>19</sup> Contractor Adobe	<sup>20</sup> Spud Date 06/15/2006
Depth to Groundwater 350' 54'		Distance from nearest fresh water well 2700'		Distance from nearest surface water None in area
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 milst 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#	390'	280	Surface
11"	8-5/8"	32#	3265'	1200	Surface
7-7/8"	5-1/2"	15.5# & 17#	7500'	750	3100'

<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.

The 11-3/4" casing will be set in the Red Bed section of the Basal Rustler formation and cemented to surface. The 8-5/8" intermediate casing will be set at least 100' below the base of the salt.

According to R-111-P  
Surface is owned by State of New Mexico. This well is located within the R-111-P area.

Waiver from Mosaic Potash Carlsbad, Inc. attached.

**A PIT CLOSURE PLAN MUST  
BE APPROVED PRIOR TO THE  
COMMENCEMENT OF  
CLOSURE OPERATIONS.**

<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 <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Annette Childers		Approved by: <i>James W. Brien</i>	
Title: Administrative Assistant		Title: District II Supervisor	
E-mail Address: machilders@basspet.com		Approval Date: FEB 20 2006 Expiration Date: FEB 20 2007	
Date: 01/11/2006	Phone: (432)683-2277	Condition of Approval At	

CEMENT TO COVER ALL  
OIL, GAS AND WATER  
BEARING ZONES

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

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 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	Pool Name
		Nash Draw (Delaware)/Bone Spring (Avalon Sand)
Property Code	Property Name	Well Number
	REMUDA BASIN "24" STATE	5
OGRID No.	Operator Name	Elevation
001801	BASS ENTERPRISES PRODUCTION COMPANY	3018'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	24	23 S	29 E		1730	NORTH	860	EAST	EDDY

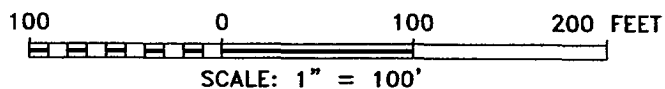
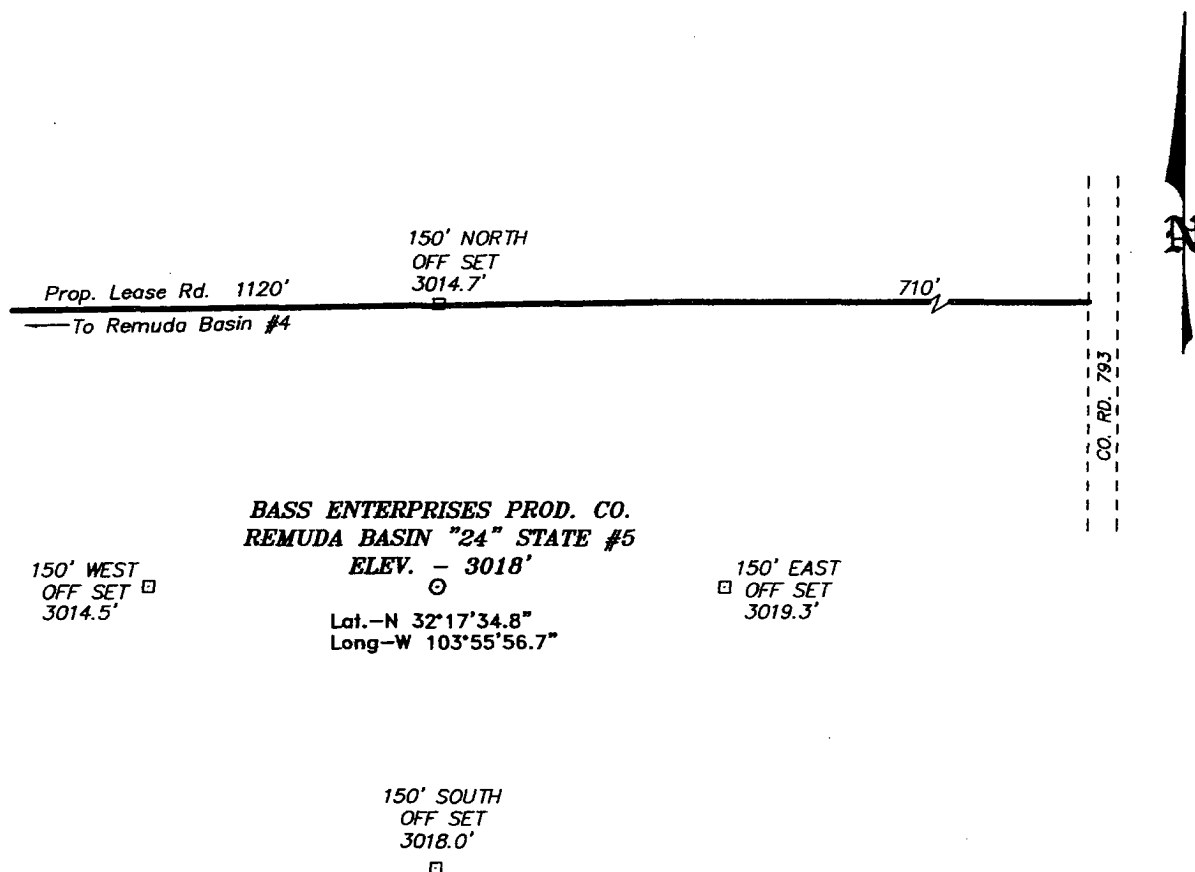
Bottom Hole Location If Different From Surface

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

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><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>W.R. Dannels</i> Signature</p> <p>W.R. DANNELS Printed Name</p> <p>DIVISION DRILLING SUPT. Title</p> <p>12/12/05 Date</p>
<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>NOVEMBER 30, 2005 Date Surveyed</p> <p><i>GARY L. JONES</i> Signature &amp; Seal of Professional Surveyor</p> <p>7977 W.D. No. 6008</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN-SURVEYS</p>				

SECTION 24, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 793, GO SOUTH FOR 3.1 MILES TO PROPOSED LEASE ROAD.

**BASS ENTERPRISES PRODUCTION CO.**

REF: REMUDA BASIN "24" STATE No. 5 / Well Pad Topo

REMUDA BASIN "24" STATE No. 5 LOCATED 1730' FROM  
THE NORTH LINE AND 860' FROM THE EAST LINE OF  
SECTION 24, TOWNSHIP 23 SOUTH, RANGE 29 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 6008

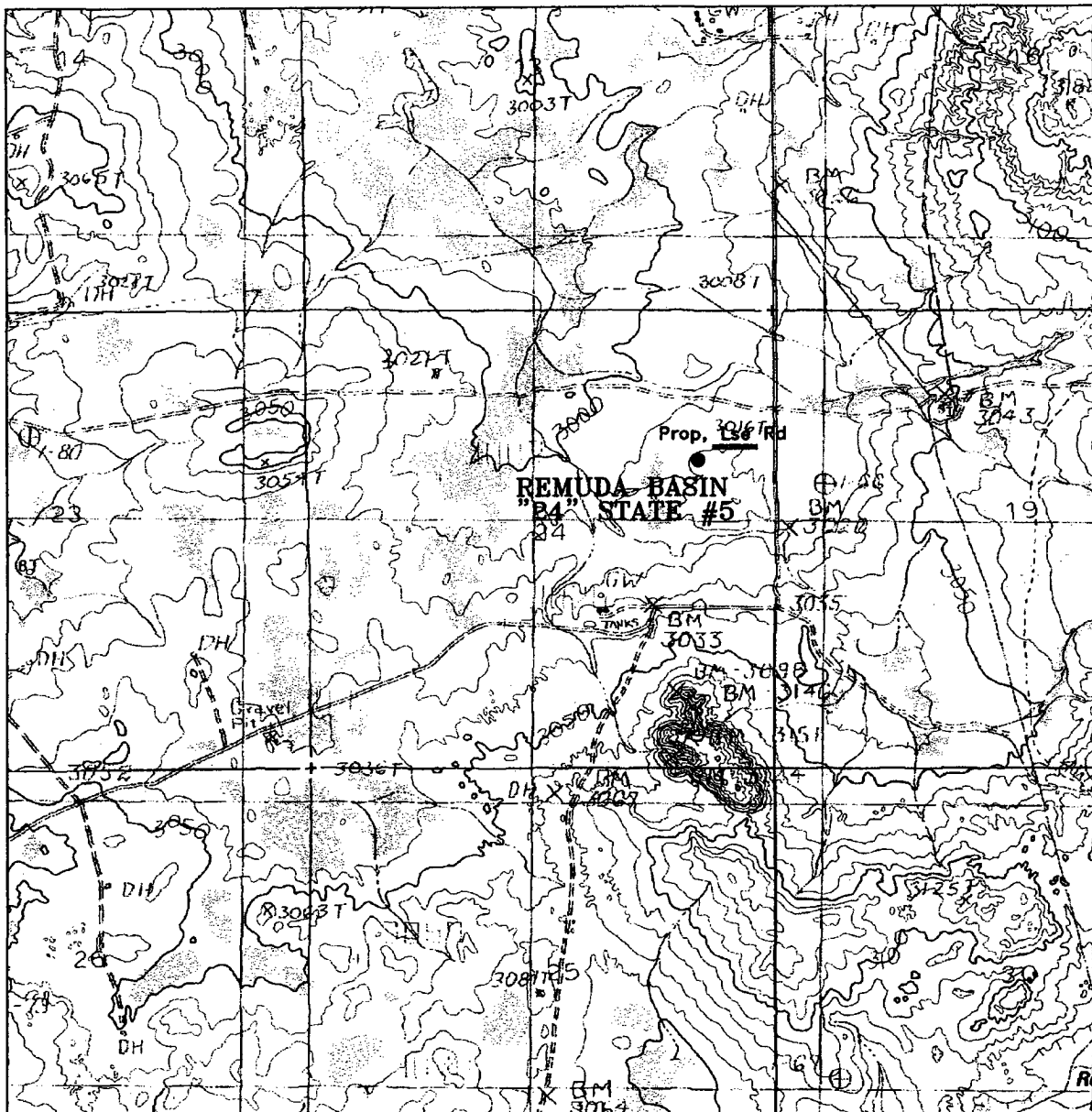
Drawn By: K. GOAD

Date: 12-07-2005

Disk: KJG CD#7 - 6008A.DWG

Survey Date: 11-30-2005

Sheet 1 of 1 Sheets



REMUDA BASIN "24" STATE #5  
 Located at 1730' FNL and 860' FEL  
 Section 24, Township 23 South, Range 29 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**

focused on excellence  
 in the oilfield

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

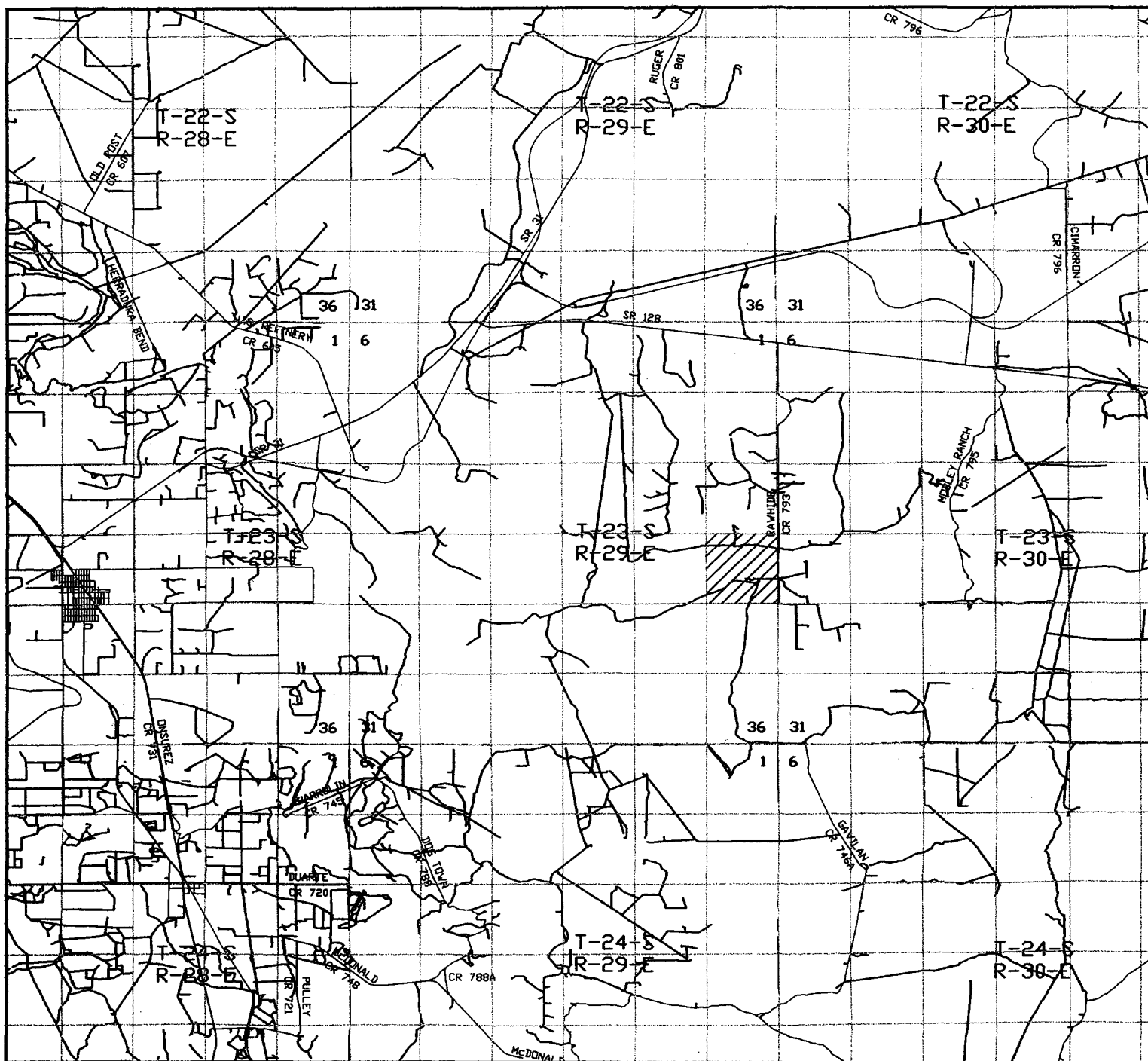
W.O. Number: 6008AA - KJG #7

Survey Date: 11-30-2005

Scale: 1" = 2000'

Date: 12-07-2005

**BASS ENTERPRISES**  
**PRODUCTION CO.**



REMUDA BASIN "24" STATE #5  
 Located at 1730' FNL and 860' FEL  
 Section 24, Township 23 South, Range 29 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
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 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 6008AA - KJG #7

Survey Date: 11-30-2005

Scale: 1" = 2 MILES

Date: 12-07-2005

**BASS ENTERPRISES**  
**PRODUCTION CO.**

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

**NAME OF WELL: Remuda Basin 24 State #5**

**LEGAL DESCRIPTION - SURFACE:** 1730' FNL & 860' FEL, Section 24, T-23-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 3035' (est)  
GL 3018'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	Not Present	Not Present	
B/Rustler	395'	+2640'	Barren
T/Salt	410'	+2625'	Barren
B/Salt	3025'	+ 10'	Barren
T/Lamar	3250'	- 215'	Barren
T/Ramsey	3280'	- 245'	Oil/Gas
T/Lwr Brushy Canyon	6730'	-3695'	Oil/Gas
T/Y" Sand	6910'	-3875'	Oil/Gas
TD	7500'	-4465'	

**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#, WC-50, ST&C	0' - 390'	Surface	New
8-5/8", 32#, WC-50, LT&C	0' - 3265'	Intermediate	New
5-1/2", 15.5#, K-55, LT&C	0' - 6000'	Production	New
5-1/2", 17#, K-55, LT&C	6000' - 7500'	Production	New

**POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)**

A BOPE consistent 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) Fifteen days after a previous test
- d) 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' - 400'	FW Spud Mud	8.5 - 9.2	45-35	NC	NC	NC	10.0
400' - 3265'	BW	10.0	28-30	NC	NC	NC	9.5-10.5
3265' - 6000'	FW	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 cc	9.5-10.5
6900' - 7500'	FW/ Starch	8.7 - 8.9	40-45	4	8	<25 cc	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 (+/- 3050').  
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>
<b>SURFACE:</b>						
Lead - 0 - 390' (100% excess) Circ cement to surface	275	390'	Premium Plus + 2% CaCl <sub>2</sub> + 1/4# Flocele	6.33	14.8	1.35
<b>INTERMEDIATE:</b>						
Lead - 0 - 2765' (200% excess) Circ cement to surface	900	2765'	Interfill C + 0.3% Halad R-322	14.11	11.9	2.45
Tail - 2765 - 3265' (200% excess)	300	500'	Premium Plus + 2% CaCl <sub>2</sub>	6.37	14.8	1.35

<b>PRODUCTION:</b>							<u>COMPRESSIVE:</u>	
Lead - 3100 - 7500' (50% excess)	750	4400'	Premium Plus + 1% Zone Sealant 2000	6.32	11.9	1.65	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 3322 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3280 - 7500'. 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

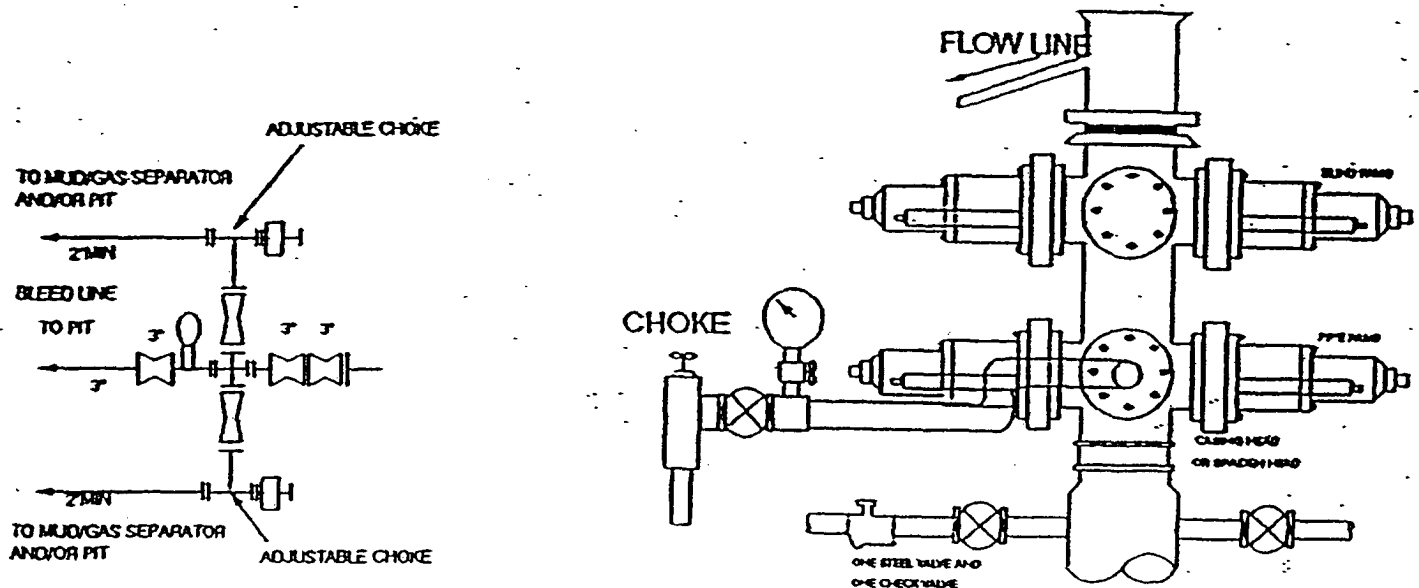
12 days drilling operations

14 days completion operations

LHS/mac  
January 10, 2006



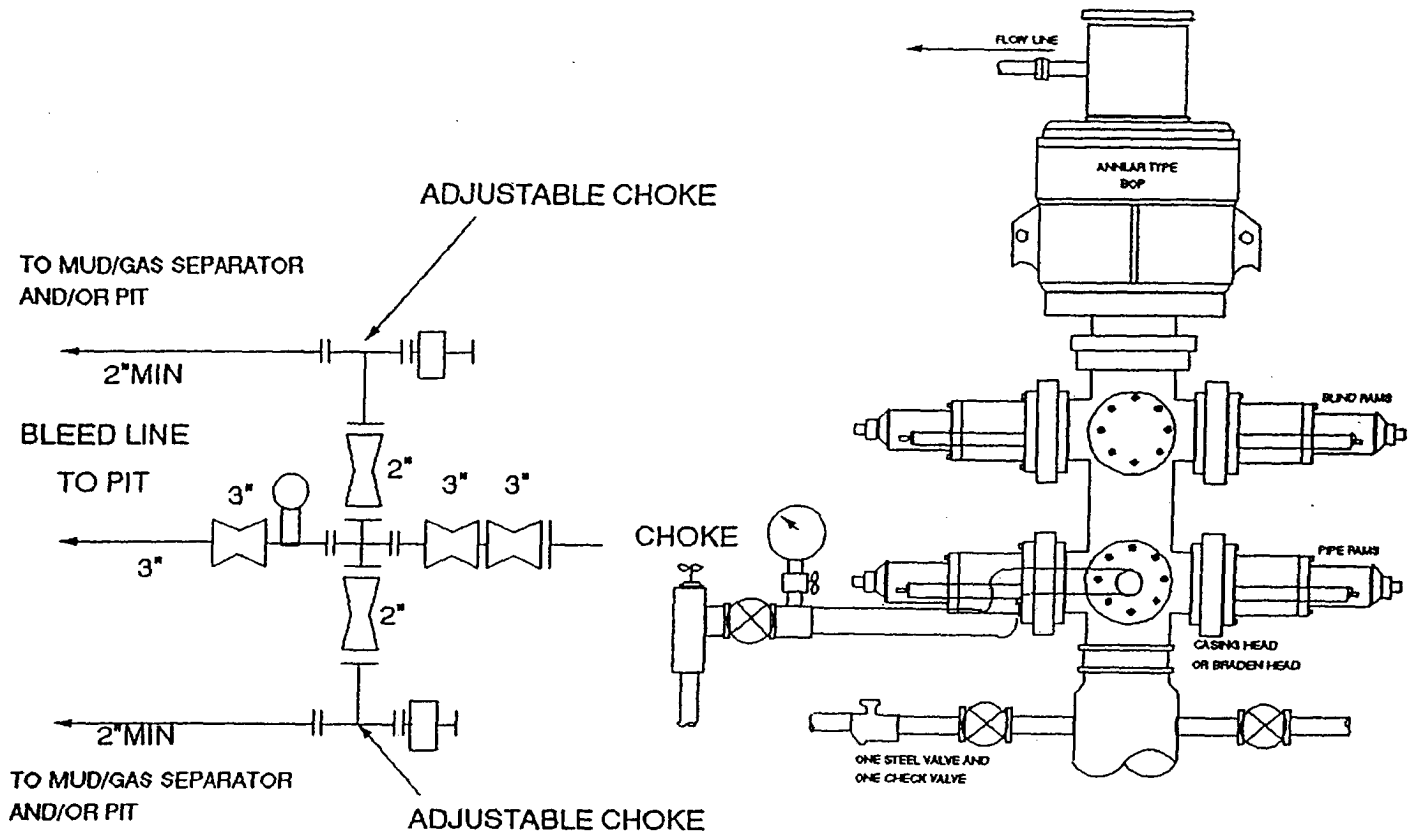
# 2000 PSI WP



## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. All chokes will be adjustable. Choke spool may be used between rams.

# 3000 PSI WP



## THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
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- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. All chokes will be adjustable. Choke spool may be used between rams.

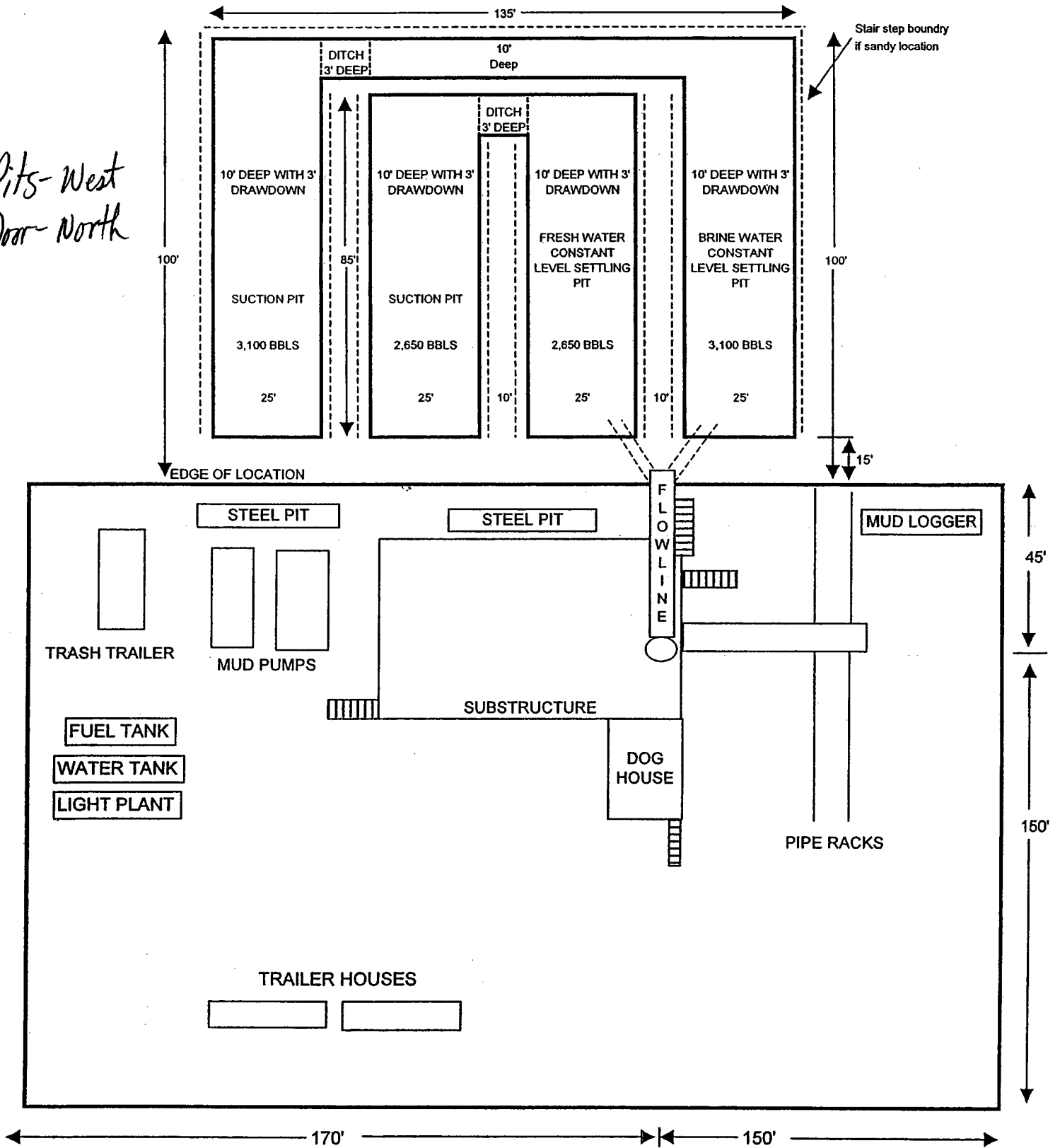
DIAGRAM 2

# BASS ENTERPRISES PRODUCTION COMPANY

*Remuda Basin 24 state #5*

## EXHIBIT "D"

*Pits - West  
1-Door - North*



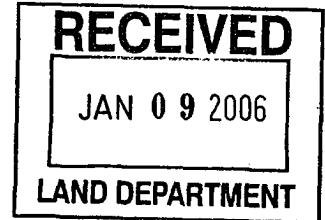


Mosaic Potash Carlsbad Inc.  
PO Box 71  
1361 Potash Mines Road  
Carlsbad, NM 88220  
www.mosaicco.com

Tel 505-887-2871  
Fax 505-887-0589

December 29, 2005

Mr. Brad Glasscock  
Bass Enterprises Production Co.  
201 Main Street  
Fort Worth, TX 76102-3131  
(817) 339-7185



Dear Mr. Glasscock:

We are in receipt of your request dated 12/20/2005 concerning 5 well locations in Section 24, T-23-S, R-29-E. Mosaic Potash Carlsbad Inc. does have a potash lease ¼ mile from the northwest corner of this section.

All locations requested (Remuda Basin 24 State #4 thru #8) are further than ¼ mile from our LMR. However, all but #7 are located in measured ore as delineated by the BLM. This ore is economically mineable but not currently in the mine plan, several oil wells have already been drilled in the area. Mosaic Potash does not object to drilling at these locations.

As more information becomes available, our estimates of the extent of potash resources in any given area may change. Therefore, please consider this "no objection" to this location to be valid for one year only. If you are still considering this well location at a date later than one year from today, notify us again at that time so we can make the decision on information current at that time. Do not consider a "no objection offered" or an "objection offered" decision to be permanent.

Mosaic Potash submits this letter in lieu of the forms requested.

Sincerely,

Dan Morehouse  
Mine Engineering Superintendent

cc: Don Purvis Charlie High Joe Lara

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

January 9, 2006

**FEDERAL EXPRESS**

Oil Conservation Division  
1301 West Grand  
Artesia, New Mexico 88210

Attention: Bryan Arrant

RECEIVED

JAN 11 2006

OCU-ARTESIA

Re: Mosaic Potash Carlsbad, Inc. Waiver of Objection to Location Letter  
Eddy County, New Mexico

Dear Mr. Arrant:

Attached is a copy of the letter from Mosaic Potash Carlsbad, Inc. to Bass, stating that they do not object to the drilling of the Remuda Basin 24 State #4 thru #8 wells at their current locations. This "no objection" is valid from 12/20/05 for one year.

If you need anything further, please do not hesitate to call me at (817) 339-7185.

Very truly yours,

A handwritten signature in black ink, appearing to read "Brad Glasscock", with a horizontal line underneath.

Brad Glasscock



Mosaic Potash Carlsbad Inc.  
PO Box 71  
1361 Potash Mines Road  
Carlsbad, NM 88220  
www.mosaicco.com

Tel 505-887-2871  
Fax 505-887-0589

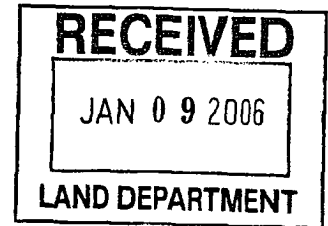
December 29, 2005

Mr. Brad Glasscock  
Bass Enterprises Production Co.  
201 Main Street  
Fort Worth, TX 76102-3131  
(817) 339-7185

RECEIVED

JAN 11 2006

000-711854



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Sincerely,

Dan Morehouse  
Mine Engineering Superintendent

cc: Don Purvis Charlie High Joe Lara



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

Oil Conservation Division

January 6, 2006  
New Mexico State Land Office  
310 Old Santa Fe Trail  
Santa Fe, NM 87504-1148  
Attn: Joe Mraz or To Whom It May Concern

RECEIVED  
JAN 09 2006  
OCD-ARTESIA

**RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA**

**OPERATOR:** Bass Enterprises Production Company  
**LEASE NAME:** Remuda Basin '24' State # 5  
**LOCATION:** SEC. 24, TOWNSHIP 23 SOUTH, RANGE 29 EAST,  
1730' FNL & 860' FEL  
EDDY COUNTY, NM, NMPM

**PROPOSED DEPTH: 7500'**

Dear Joe or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Sincerely,

**Bryan G. Arrant**  
PES, District II Artesia NMOCD

In LMR Yes \_\_\_\_\_ No X  
In Buffer Zone Yes \_\_\_\_\_ No X

John  
1-6-06  
8 AM

Comments:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

January 6, 2006  
Bureau of Land Management  
620 East Green St.  
Carlsbad, NM 88220  
Attn: Craig Crantson or To Whom It May Concern

**RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA**

**OPERATOR:** Bass Enterprises Production Company  
**LEASE NAME:** Remuda Basin '24' State # 5  
**LOCATION:** SEC. 24, TOWNSHIP 23 SOUTH, RANGE 29 EAST,  
1730' FNL & 860' FEL  
EDDY COUNTY, NM, NMPM

**PROPOSED DEPTH: 7500'**

Dear Craig or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of-Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Sincerely,

**Bryan G. Arrant**  
PES, District II Artesia NMOCD

In LMR	Yes _____	No <input checked="" type="checkbox"/>
In Buffer Zone	Yes _____	No <input checked="" type="checkbox"/>

Comments:

Signature: \_\_\_\_\_

Date: 1-9-06