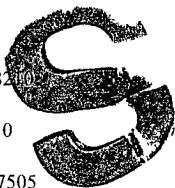


District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88202
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505



State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

OCT 01 2007
Submit to appropriate District Office
OCD-ARTESIA ☐ AMENDED REPORT

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

¹ Operator Name and Address BEP CO, L.P P O. Box 2760 Midland, Texas 79702		² OGRID Number 001801
³ Property Code 35100	⁵ Property Name Horned Toad 36 State	⁴ ABL Number 30 - 015 - 55837
⁹ Proposed Pool 1 Nash Draw (Delaware, Bone Spring, Avalon Sd)		⁶ Well No 2H
¹⁰ Proposed Pool 2		

7 Surface Location

UL or lot no B	Section 36	Township 24S	Range 29E	Lot Idn	Feet from the 220	North/South line North	Feet from the 240	East/West line East	County Eddy
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8 Proposed Bottom Hole Location If Different From Surface

UL or lot no A	Section 36	Township 24S	Range 29E	Lot Idn	Feet from the 990	North/South line North	Feet from the 330	East/West line East	County Eddy
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Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3113' GL
¹⁶ Multiple No	¹⁷ Proposed Depth 7500' MD 5487' TVD	¹⁸ Formation Delaware	¹⁹ Contractor Adobe Drilling	²⁰ Spud Date 10/15/2007
Depth to Groundwater 150'		Distance from nearest fresh water well 2-1/2 miles		Distance from nearest surface water 2 miles
Pit Liner Synthetic ☒ 12 mils thick Clay ☐ Pit Volume 1500 bbls Drilling Method Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	907' MD	829	Surface
12-1/4"	9-5/8"	36#	3860' MD	864	Surface
8-3/4"	5-1/2"	17#	7500' MD	635	3040'

²² 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

As stated in the attached drilling plan this well will be a horizontal well with KOP of approximately 5000' TVD an azimuth of 110.31°, build angle of 12.00°/100', and a bottom hole target of 7500' MD (lateral displacement +/- 1850') TVD 5487'. See attached directional plan and 8 point drilling plan for details.

BEP CO's surface location is unorthodox, however at the top of the Lower Cherry Canyon the well path will be 330' FNL & 520' FWL of Quarter section line. BEPCO does not plan to perforate above the top of Lower Cherry Canyon.

²³ 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 ☐.

Printed name: Annette Childers *Annette Childers*

Title: Administrative Assistant

E-mail Address: machilders@basspet.com

Date: 9-28-07

Phone: 432-683-2277

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARRANT

DISTRICT II GEOLOGIST

Approval Date: OCT 01 2007

Expiration Date: OCT 01 2008

Conditions of Approval Attached ☐

NSC - Drill only
Required

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code 47545	Pool Name Nash Draw (Delaware, Bone Spring, Avalon Sd)
Property Code 35100	Property Name HORNE TOAD "36" STATE		Well Number 2H
OGRID No. 001801	Operator Name BEPCO, L.P.		Elevation 3113'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	36	24 S	29 E		220	NORTH	2410	EAST	EDDY

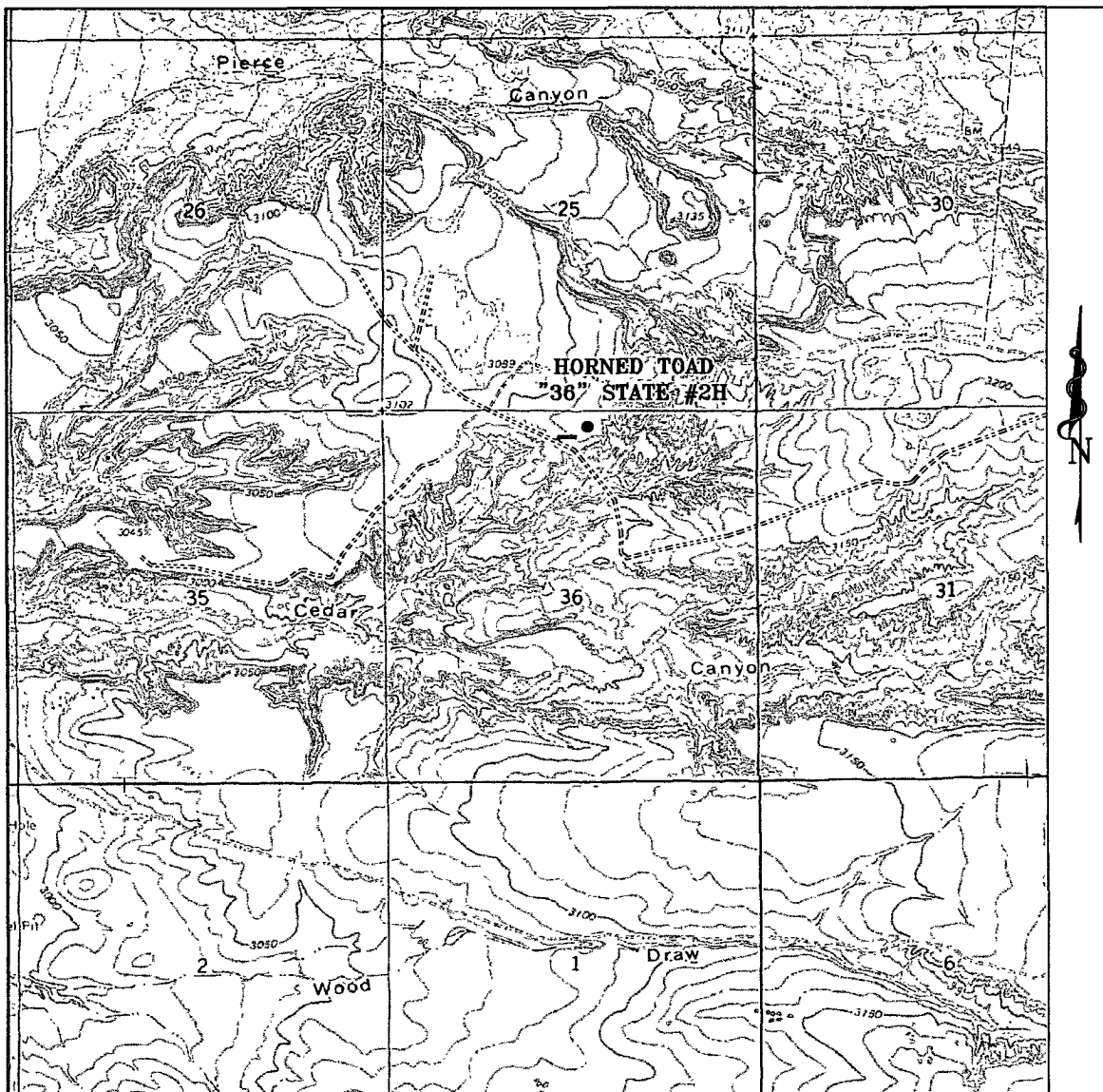
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	24 S	29 E		990	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80	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

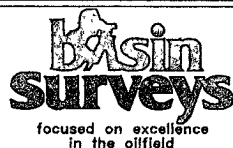
SURFACE LOCATION LAT - N32°10'49.86" LONG - W103°56'14.02" SPC- N.: 429632.267 E.: 663884.383 (NAD-83)				OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Gary E. Gerhard</i> 9/21/07 Signature Date Gary E. Gerhard Printed Name	
ENTRY POINT LAT - N32°10'48.76" LONG - W103°56'10.57" SPC- N.: 429522.267 E.: 664181.526 (NAD-83)		BOTTOM HOLE LOCATION LAT - N32°10'42.19" LONG - W103°55'49.84" SPC- N.: 428864.554 E.: 665966.048 (NAD-83)		SURVEYOR CERTIFICATION 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. SEPTEMBER 21, 2007 Date Surveyed Signature & Seal Professional Surveyor <i>Gary L. Jones</i> 7977 Certificate No. Gary L. Jones 7977 BASIN SURVEYS	



HORNED TOAD '36" STATE #2H

220' FNL and 2410' 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

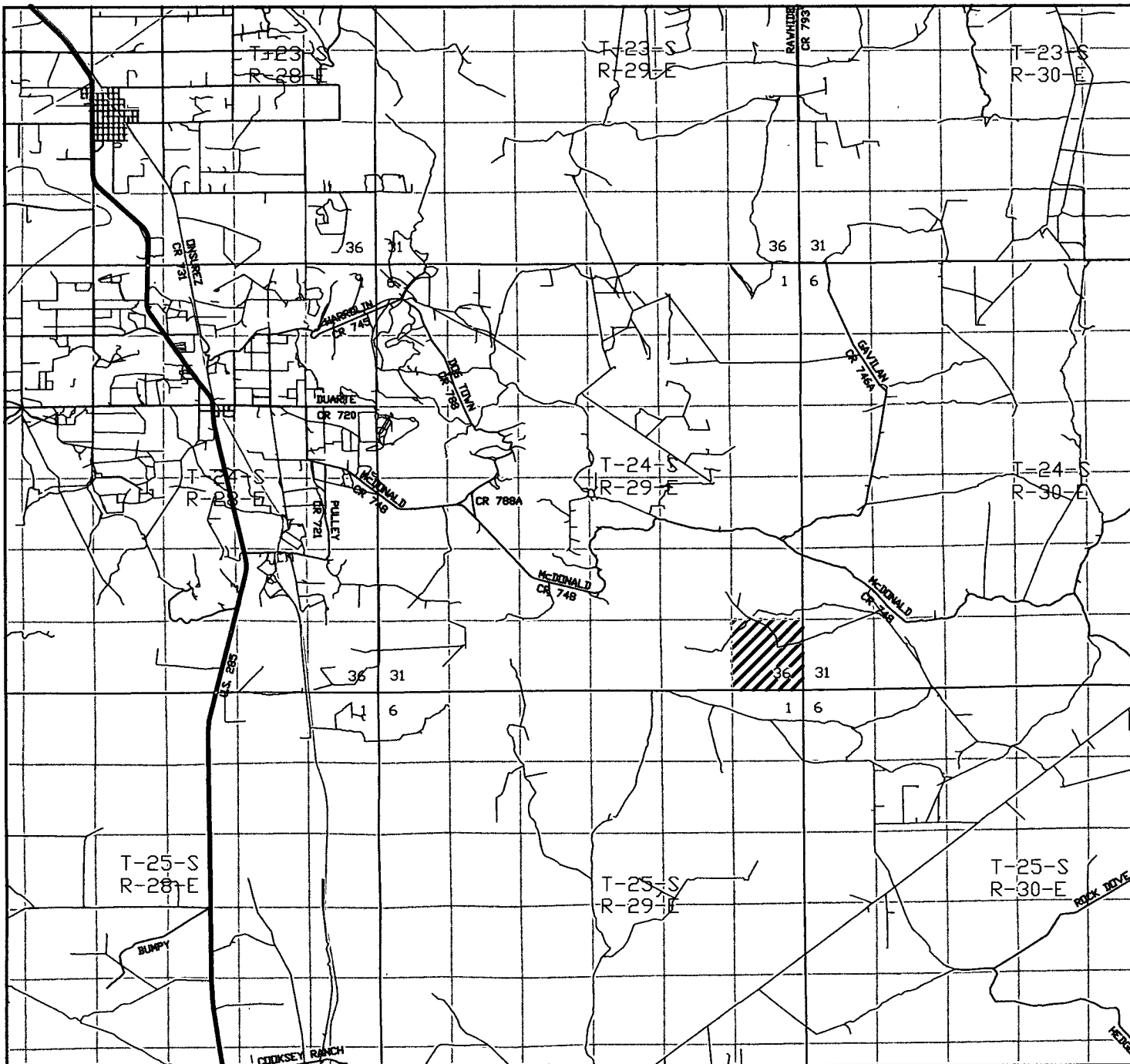
W.O. Number: JMS 18629T

Survey Date: 09-21-2007

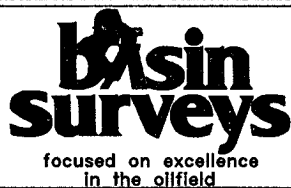
Scale: 1" = 2000'

Date: 09-24-2007

BEPCO, L.P.



HORNED TOAD "36" STATE #2H
 220' FNL and 2410' 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: JMS 18629TR

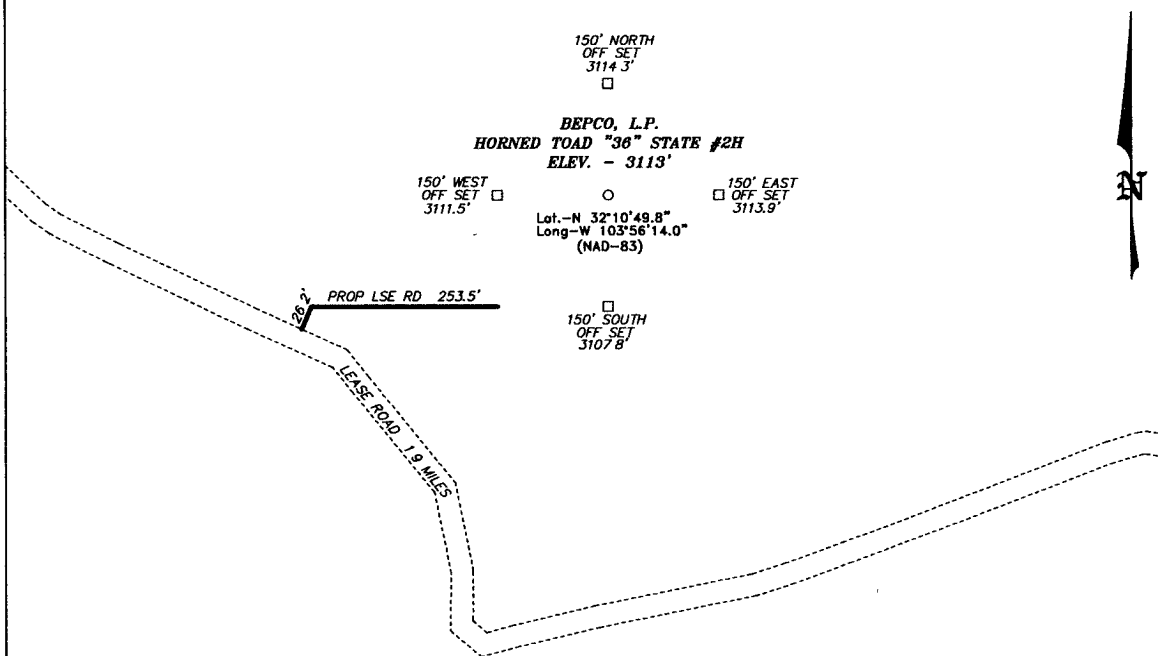
Survey Date: 09-21-2007

Scale: 1" = 2 MILES

Date: 09-24-2007

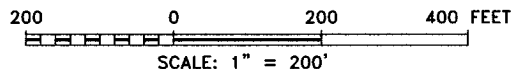
BEPCO, L.P.

**SECTION 36, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF CO. RD. 746A AND CO. RD. 748, GO SOUTHEAST ON CO. RD. 748 FOR 1.4 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTHERLY 0.5 MILES TO PIPELINE ROAD, FROM THE JUNCTION ON PIPELINE ROAD AND LEASE ROAD CONTINUE WEST 1.9 MILES TO PROPOSED LEASE ROAD.



BEPCO, L.P.

REF: HORNE TOAD "36" STATE #2H / WELL PAD AND TOPO

THE HORNE TOAD "36" STATE #2H LOCATED 220'
FROM THE NORTH LINE AND 2410' FROM THE EAST LINE OF
SECTION 36, TOWNSHIP 24 SOUTH, RANGE 29 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Basin Surveys P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 18629

Drawn By: J. SMALL

Date: 09-24-2007

Disk: 18629W JMS

Survey Date: 09-21-2007

Sheet 1 of 1 Sheets

Surface casing to be set into the Rustler below all fresh water sands.

Production casing will be cemented using Halliburton acid soluble cement system in lateral hole with TOC at approximately 2,860' (approximately 500' into intermediate casing).

Drilling procedure, BOP diagram, anticipated tops attached.

This well is located outside the Secretary's Potash area. There are no potash leases within 1 mile of the location.

BEPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a subsidiary of BEPCO, L.P., 201 Mail Street, Ft. Worth, TX, 76102. Bond No. NM 2204 (Nationwide).

EIGHT POINT DRILLING PROGRAM BEPCO, L.P.

NAME OF WELL: Horned Toad 36 State #2H

LEGAL DESCRIPTION - SURFACE: 220' FNL & 2420' FEL, Section 36, T24S, R29E, Eddy County, NM.
BHL: 990' FNL & 330' FEL, Section 36, T24S, R29E, 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 3130' (est.)
GL 3113'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>		<u>ESTIMATED SUB-SEA TOP</u>	<u>BEARING</u>
	<u>TVD</u>	<u>MD</u>		
T/Rustler	438'	438'	+ 2692'	Barren
B/Rustler	880'	880'	+ 2250'	Barren
T/Salt	905'	905'	+ 2225'	Barren
B/Salt	3120'	3120'	+ 10'	Barren
T/Lamar Lime	3330'	3330'	- 200'	Barren
T/Ramsey	3365'	3365'	- 235'	Oil/Gas
KOP (Kick Off Point)	5013'	5013'	- 1883'	NA
T/Lower Cherry Canyon	5440'	5897'	- 2310'	Oil/Gas
TD (end of lateral)	5475'	7500'	- 2345'	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS (MD)</u>	<u>Hole Size</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, ST&C	0' - 907'	17-1/2"	Surface	New
9-5/8", 36#, J-55, 8rd, LT&C	0' - 3360'	12-1/4"	Intermediate	New
5-1/2", 17#, P-110, LT&C	0' - 3750'	8-3/4"	Production	New
5-1/2", 17#, P-110, Ultra Flush Jt	3750' - 7500'	8-3/4"	Production	New

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

The blowout preventer equipment will be as shown in Diagram #2 and will consist of a double ram type preventer (3000 psi WP) and a bag type (Hydril) annular preventer (3000 psi WP). The same BOPE will be installed on the surface casinghead and on all subsequent casing strings. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casinghead will be hydro-tested to 1000 psig with the rig mud 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

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 907'	FW Spud Mud	8.5 – 9.2	38-70	NC	NC	NC	10.0
907' - 3360'	Brine Water	9.8 – 10.2	28-30	NC	NC	NC	9.5 – 10.5
3360' - 5617'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0
5617' - 5700'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0
5700' - 7500'	FW/Gel/Starch	8.7 – 9.0	28-36	NC	NC	<100	9.5 – 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING

Run #1: PEX (GR-CNL/LDT-AIT) as deep as possible in deviated hole to 3200' with GR-CNL to surface.

Run #2: GR with MWD during drilling of build and horizontal portions of 8-3/4" hole.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX
SURFACE:						
Lead: 0 – 607' (100% excess Circ to surface)	490	607	Halliburton Light + 2.7 #/sk Salt	10.14	12.8	1.87
Tail: 607' – 907' (100% excess)	340	300	Premium Plus + 2% CaCl ₂	6.37	14.8	1.35
INTERMEDIATE:						
Lead: 0' – 2860' (100% excess Circ to surface)	600	2860	Interfill C + 0.125 lb/sk Poly-e-flake	16.43	11.5	2.76
Tail: 2860' – 3360' (100% excess)	263	500	Premium Plus + 0.4% Halad-9	6.29	14.8	1.33

PRODUCTION:

Lead 2860' - 5025' (50% excess circ to surface)	325	2165	50/50 Poz C + 10% D20 + 0.02% D46 + 0.125 pps D130 + 5% D44	14.68	11.8	2.52
Tail 5025' - 7500' (50% excess)	305	2475	Super H Cement + 0.5% LAP-1 + 0.3% CFR-3 + 3 #/sk Salt + 5 #/sk Gilsonite + 0.25 #/sk D-AIR 3000	11.20	15.0	2.61

E) DIRECTIONAL DRILLING

BEPCO, L.P. plans to drill out the 9-5/8" intermediate casing with a 8-3/4" bit to a TVD of approximately 5010' at which point a directional hole will be kicked off and drilled at an azimuth of 110.31°, building angle at 12.00°/100' to a max angle of 90° at a TVD of 5487' (MD 5760'). This 90° angle will be maintained to a MD of 7500' or TVD of 5487'.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 2397 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 3342'-7132'. No H₂S is anticipated.

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

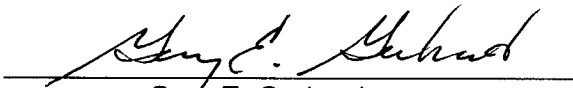
Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

26 days drilling operations

14 days completion operations


 Gary E. Gerhard

GEG/mac
 September 28, 2007

BEPCO, L.P.
P. O. Box 2760
Midland, Texas 79702

432-683-2277

August 29, 2007

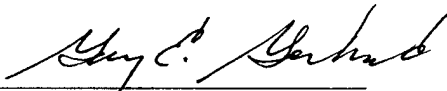
FAX: 432-687-0329

State of New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

To Whom It May Concern:

I am writing to request a waiver for the inclusion of an H₂S Contingency Plan for Horned Toad 36 State #2H. The current plan is to complete this well in the Delaware Lower Cherry Canyon, which is not known to BEPCO, L.P. to contain H₂S in excess of 100 ppm and we do not anticipate encountering any H₂S bearing formations during drilling operations.

Sincerely,



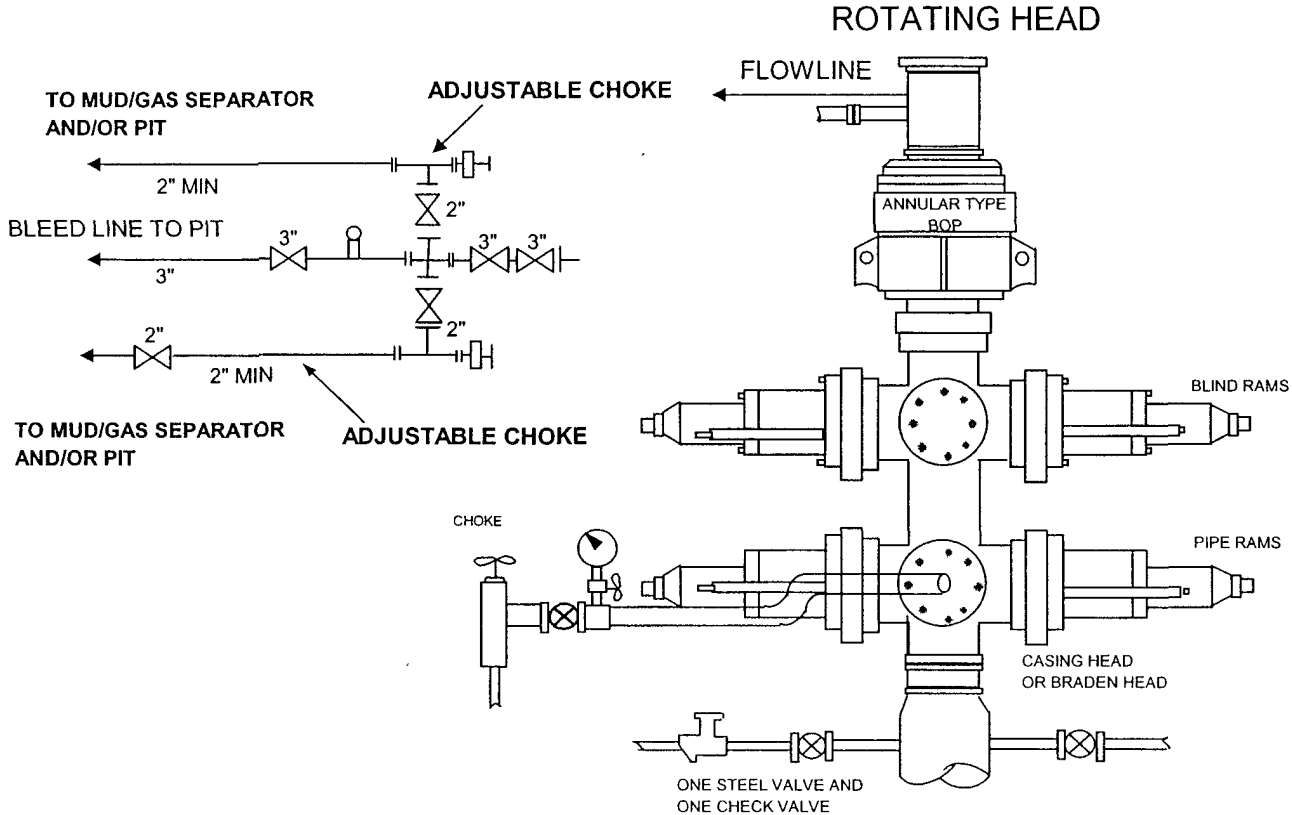
Gary E. Gerhard
Drilling Engineer

GEG/mac

BEPCO, L. P.

3-M WP BOPE WITH 3-M WP ANNULAR

3 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate Blowout preventer with lower pipe rams and upper blind rams, 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 BOPs.
- 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. Chokes must be adjustable. Choke spool may be used between rams.

DIAGRAM 1



Bass Enterprises Production Co.

Eddy Co., New Mexico (Nad 83)

Horned Toad 36 State #2H

Horned Toad 36 State #2H

Lateral #1

Plan: Plan #1c

Standard Survey Report

28 September, 2007





Black Viper Energy

Survey Report



Company:	Bass Enterprises Production Co.	Local Co-ordinate Reference:	Well Horned Toad 36 State #2H
Project:	Eddy Co., New Mexico (Nad 83)	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Horned Toad 36 State #2H	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Horned Toad 36 State #2H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1c	Database:	EDM 2003 14.1 0 Server DB

Project	Eddy Co. New Mexico (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Horned Toad 36 State #2H		
Site Position:		Northing:	429,632.27 ft
From:	Map	Easting:	663,884.38 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 10' 49.851 N
		Longitude:	103° 56' 14.040 W
		Grid Convergence:	0.21 °

Well	Horned Toad 36 State #2H		
Well Position	+N/-S	0.00 ft	Northing: 429,632.27 ft
	+E/-W	0.00 ft	Easting: 663,884.38 ft
			Latitude: 32° 10' 49.851 N
			Longitude: 103° 56' 14.040 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	3,142.00 ft
		Ground Level:	0.00 ft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/17/2007	8.19	60.18	48,978

Design	Plan #1c			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	5,009.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	110.24

Survey Tool Program	Date	9/28/2007		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
5,009.00	7,500.79	Plan #1c (Lateral #1)	MWD	MWD - Standard

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,009.00	0.00	0.84	5,009.00	0.00	0.00	0.00	0.00	0.00	0.00
5,009.53	0.00	0.84	5,009.53	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 12.0° / 100									
5,025.00	1.86	110.24	5,025.00	-0.09	0.23	0.25	12.00	12.00	0.00
5,050.00	4.86	110.24	5,049.95	-0.59	1.61	1.71	12.00	12.00	0.00
5,075.00	7.86	110.24	5,074.80	-1.55	4.20	4.48	12.00	12.00	0.00
5,100.00	10.86	110.24	5,099.46	-2.96	8.02	8.54	12.00	12.00	0.00
5,125.00	13.86	110.24	5,123.88	-4.81	13.04	13.89	12.00	12.00	0.00
5,150.00	16.86	110.24	5,147.98	-7.10	19.25	20.51	12.00	12.00	0.00
5,175.00	19.86	110.24	5,171.71	-9.82	26.63	28.39	12.00	12.00	0.00
5,200.00	22.86	110.24	5,194.99	-12.97	35.17	37.49	12.00	12.00	0.00
5,225.00	25.86	110.24	5,217.76	-16.54	44.84	47.80	12.00	12.00	0.00
5,250.00	28.86	110.24	5,239.96	-20.51	55.62	59.28	12.00	12.00	0.00



Black Viper Energy

Survey Report



Company:	Bass Enterprises Production Co	Local Co-ordinate Reference:	Well Horned Toad 36 State #2H
Project:	Eddy Co , New Mexico (Nad 83)	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Horned Toad 36 State #2H	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Horned Toad 36 State #2H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1c	Database:	EDM 2003.14.1.0 Server DB

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,275.00	31.86	110.24	5,261.53	-24.88	67.47	71.92	12.00	12.00	0.00
5,300.00	34.86	110.24	5,282.41	-29.64	80.37	85.66	12.00	12.00	0.00
5,325.00	37.86	110.24	5,302.54	-34.77	94.27	100.48	12.00	12.00	0.00
5,350.00	40.86	110.24	5,321.87	-40.25	109.14	116.33	12.00	12.00	0.00
5,375.00	43.86	110.24	5,340.34	-46.08	124.95	133.17	12.00	12.00	0.00
5,400.00	46.86	110.24	5,357.91	-52.23	141.63	150.96	12.00	12.00	0.00
5,425.00	49.86	110.24	5,374.52	-58.70	159.16	169.64	12.00	12.00	0.00
5,450.00	52.86	110.24	5,390.13	-65.45	177.48	189.16	12.00	12.00	0.00
5,475.00	55.86	110.24	5,404.70	-72.48	196.54	209.47	12.00	12.00	0.00
5,500.00	58.86	110.24	5,418.18	-79.76	216.28	230.52	12.00	12.00	0.00
5,525.00	61.86	110.24	5,430.55	-87.28	236.67	252.25	12.00	12.00	0.00
5,550.00	64.86	110.24	5,441.76	-95.01	257.63	274.59	12.00	12.00	0.00
5,575.00	67.86	110.24	5,451.78	-102.94	279.11	297.49	12.00	12.00	0.00
5,575.58	67.93	110.24	5,452.00	-103.12	279.62	298.03	12.00	12.00	0.00
T/ Lower Cherry Canyon									
5,600.00	70.86	110.24	5,460.59	-111.03	301.06	320.88	12.00	12.00	0.00
5,625.00	73.86	110.24	5,468.17	-119.27	323.41	344.70	12.00	12.00	0.00
5,650.00	76.86	110.24	5,474.49	-127.64	346.10	368.89	12.00	12.00	0.00
5,675.00	79.86	110.24	5,479.54	-136.11	369.07	393.37	12.00	12.00	0.00
5,700.00	82.86	110.24	5,483.29	-144.66	392.26	418.08	12.00	12.00	0.00
5,725.00	85.86	110.24	5,485.75	-153.27	415.60	442.96	12.00	12.00	0.00
5,750.00	88.86	110.24	5,486.90	-161.91	439.03	467.93	12.00	12.00	0.00
5,759.54	90.00	110.24	5,487.00	-165.21	447.98	477.47	11.99	11.99	0.00
EOC - Hold 90.0° Inc. :: 110.24° Azi.									
5,800.00	90.00	110.24	5,487.00	-179.21	485.94	517.93	0.00	0.00	0.00
5,900.00	90.00	110.24	5,487.00	-213.81	579.76	617.93	0.00	0.00	0.00
6,000.00	90.00	110.24	5,487.00	-248.42	673.58	717.93	0.00	0.00	0.00
6,100.00	90.00	110.24	5,487.00	-283.02	767.41	817.93	0.00	0.00	0.00
6,200.00	90.00	110.24	5,487.00	-317.62	861.23	917.93	0.00	0.00	0.00
6,300.00	90.00	110.24	5,487.00	-352.22	955.05	1,017.93	0.00	0.00	0.00
6,400.00	90.00	110.24	5,487.00	-386.82	1,048.87	1,117.93	0.00	0.00	0.00
6,500.00	90.00	110.24	5,487.00	-421.42	1,142.70	1,217.93	0.00	0.00	0.00
6,600.00	90.00	110.24	5,487.00	-456.03	1,236.52	1,317.93	0.00	0.00	0.00
6,700.00	90.00	110.24	5,487.00	-490.63	1,330.34	1,417.93	0.00	0.00	0.00
6,800.00	90.00	110.24	5,487.00	-525.23	1,424.17	1,517.93	0.00	0.00	0.00
6,900.00	90.00	110.24	5,487.00	-559.83	1,517.99	1,617.93	0.00	0.00	0.00
7,000.00	90.00	110.24	5,487.00	-594.43	1,611.81	1,717.93	0.00	0.00	0.00
7,100.00	90.00	110.24	5,487.00	-629.03	1,705.63	1,817.93	0.00	0.00	0.00
7,200.00	90.00	110.24	5,487.00	-663.64	1,799.46	1,917.93	0.00	0.00	0.00
7,300.00	90.00	110.24	5,487.00	-698.24	1,893.28	2,017.93	0.00	0.00	0.00
7,400.00	90.00	110.24	5,487.00	-732.84	1,987.10	2,117.93	0.00	0.00	0.00
7,500.79	90.00	110.24	5,487.00	-767.71	2,081.66	2,218.72	0.00	0.00	0.00
PBHL#1[HT36#2H]									



Black Viper Energy

Survey Report



Company:	Bass Enterprises Production Co.	Local Co-ordinate Reference:	Well Horned Toad 36 State #2H
Project:	Eddy Co., New Mexico (Nad 83)	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Horned Toad 36 State #2H	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Horned Toad 36 State #2H	North Reference:	Gnd
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1c	Database:	EDM 2003.14.1.0 Server DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PP#1[HT36#2H]	0.00	0.00	3,342.00	-110.00	297.14	429,522.27	664,181.53	32° 10' 48.752 N	103° 56' 10.587 W
- plan misses by 1696.85ft at 5009.00ft MD (5009.00 TVD, 0.00 N, 0.00 E)									
- Point									
PBHL#1[HT36#2H]	0.00	0.00	5,487.00	-767.71	2,081.66	428,864.55	665,966.05	32° 10' 42.178 N	103° 55' 49.851 W
- plan hits target									
- Point									
PP#1c[HT36#2H]	0.00	0.00	5,009.00	-110.00	297.14	429,522.27	664,181.52	32° 10' 48.752 N	103° 56' 10.587 W
- plan misses by 316.85ft at 5009.00ft MD (5009.00 TVD, 0.00 N, 0.00 E)									
- Point									
EOC	0.00	0.00	5,487.00	-275.12	745.15	429,357.15	664,629.53	32° 10' 47.102 N	103° 56' 5.381 W
- plan hits target									
- Point									
PP#1b[HT36#2H]	0.00	0.00	4,500.00	-110.00	297.14	429,522.27	664,181.52	32° 10' 48.752 N	103° 56' 10.587 W
- plan misses by 599.56ft at 5009.00ft MD (5009.00 TVD, 0.00 N, 0.00 E)									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
5,575.58	5,452.00	T/ Lower Cherry Canyon		0.00	0.84

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
(ft)	(ft)	(ft)	(ft)		
5,009.53	5,009.53	0.00	0.00	KOP - Build 12.0° / 100	
5,759.54	5,487.00	0.00	0.00	EOC - Hold 90.0° Inc. 110.24° Azi.	

Checked By: _____	Approved By: _____	Date: _____
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Horned Toad 36 State #2H - Plan #1c

Company:
Survey / Plan:
Wellbore Type:

Bass Enterprises Production Co.
Horned Toad 36 State #2H - Plan #1c
Horizontal

County:
Well Name:

Eddy Co., New Mexico (Nad 83)
Horned Toad 36 State #2H



	Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
Reference	0	0	0	0	0	0	0	0
File In								
KOP	5009	0	0.839	5009	0	0	0	0
	5009.53	0	0	5009.53	0	0	0	0
Build 12.0° / 100	5025	1.856	110.244	5025	-0.09	0.23	0.25	12
	5050	4.856	110.244	5049.95	-0.59	1.61	1.71	12
	5075	7.856	110.244	5074.8	-1.55	4.2	4.48	12
	5100	10.856	110.244	5099.46	-2.96	8.02	8.54	12
	5125	13.856	110.244	5123.88	-4.81	13.04	13.89	12
	5150	16.856	110.244	5147.98	-7.1	19.25	20.51	12
	5175	19.856	110.244	5171.71	-9.82	26.63	28.39	12
	5200	22.856	110.244	5194.99	-12.97	35.17	37.49	12
	5225	25.856	110.244	5217.76	-16.54	44.84	47.8	12
	5250	28.856	110.244	5239.96	-20.51	55.62	59.28	12
	5275	31.856	110.244	5261.53	-24.88	67.47	71.92	12
	5300	34.856	110.244	5282.41	-29.64	80.37	85.66	12
	5325	37.856	110.244	5302.54	-34.77	94.27	100.48	12
	5350	40.856	110.244	5321.87	-40.25	109.14	116.33	12
	5375	43.856	110.244	5340.34	-46.08	124.95	133.17	12
	5400	46.856	110.244	5357.91	-52.23	141.63	150.96	12
	5425	49.856	110.244	5374.52	-58.7	159.16	169.64	12
	5450	52.856	110.244	5390.13	-65.45	177.48	189.16	12
	5475	55.856	110.244	5404.7	-72.48	196.54	209.47	12
	5500	58.856	110.244	5418.18	-79.76	216.28	230.52	12
	5525	61.856	110.244	5430.55	-87.28	236.67	252.25	12
	5550	64.856	110.244	5441.76	-95.01	257.63	274.59	12
	5575	67.856	110.244	5451.78	-102.94	279.11	297.49	12
	5600	70.856	110.244	5460.59	-111.03	301.06	320.88	12
	5625	73.856	110.244	5468.17	-119.27	323.41	344.7	12
	5650	76.856	110.244	5474.49	-127.64	346.1	368.89	12
	5675	79.856	110.244	5479.54	-136.11	369.07	393.37	12
	5700	82.856	110.244	5483.29	-144.66	392.26	418.08	12
	5725	85.856	110.244	5485.75	-153.27	415.6	442.96	12
	5750	88.856	110.244	5486.9	-161.91	439.03	467.93	12
EOC	5759.54	90	110.244	5487	-165.21	447.97	477.47	12
Hold 90.0° Inc.								
110.24°	5800	90	110.244	5487	-179.21	485.94	517.93	0
	5900	90	110.244	5487	-213.81	579.76	617.93	0
	6000	90	110.244	5487	-248.42	673.58	717.93	0
	6100	90	110.244	5487	-283.02	767.41	817.93	0
	6200	90	110.244	5487	-317.62	861.23	917.93	0
	6300	90	110.244	5487	-352.22	955.05	1017.93	0
	6400	90	110.244	5487	-386.82	1048.87	1117.93	0
	6500	90	110.244	5487	-421.42	1142.7	1217.93	0
	6600	90	110.244	5487	-456.03	1236.52	1317.93	0
	6700	90	110.244	5487	-490.63	1330.34	1417.93	0
	6800	90	110.244	5487	-525.23	1424.17	1517.93	0
	6900	90	110.244	5487	-559.83	1517.99	1617.93	0
	7000	90	110.244	5487	-594.43	1611.81	1717.93	0

	7100	90	110.244	5487	-629.03	1705.63	1817.93	0
	7200	90	110.244	5487	-663.64	1799.46	1917.93	0
	7300	90	110.244	5487	-698.24	1893.28	2017.93	0
	7400	90	110.244	5487	-732.84	1987.1	2117.93	0
TD	7500.79	90	110.244	5487	-767.71	2081.66	2218.72	0

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 110.244° (Grid).

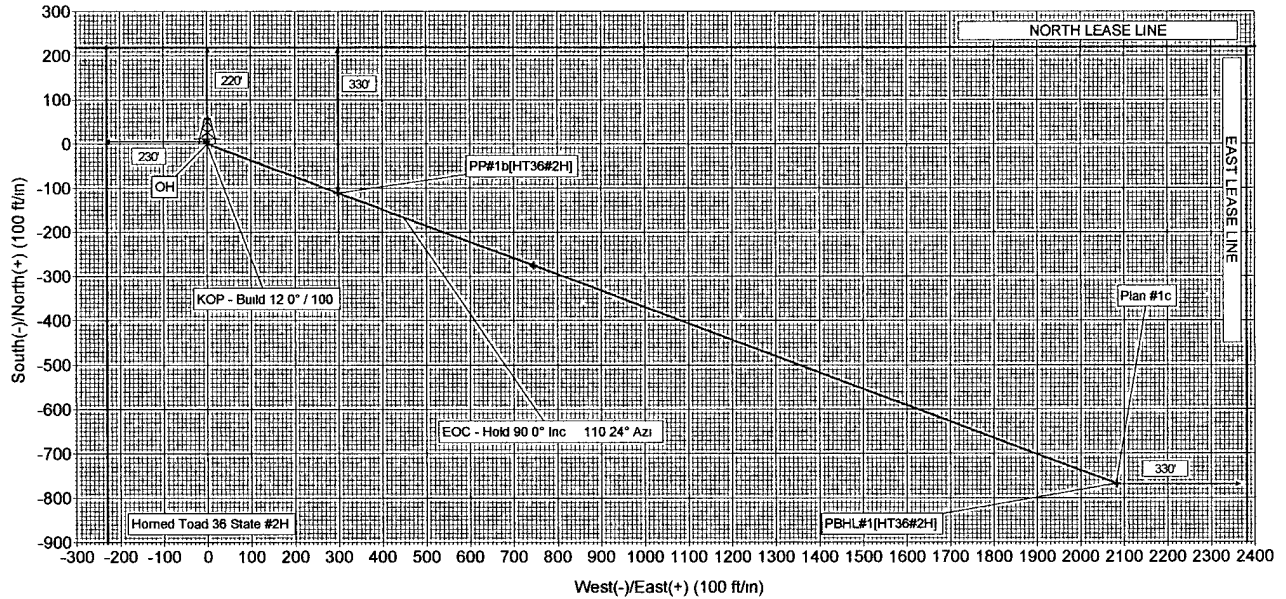
Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.211°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 7500.79ft.,
the Bottom Hole Displacement is 2218.72ft., in the Direction of 110.244° (Grid).

Horned Toad 36 State #2H - Plan #1c



Project Eddy Co., New Mexico (Nad 83)
Site Horned Toad 36 State #2H
Well Horned Toad 36 State #2H
Wellbore Lateral #1
Plan: Plan #1c (Horned Toad 36 State #2H/Lateral #1)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	5009.00	0.00	0.84	5009.00	0.00	0.00	0.00	0.00	0.00	
2	5009.53	0.00	0.00	5009.53	0.00	0.00	0.00	0.00	0.00	
3	5759.54	90.00	110.24	5487.00	-165.21	447.97	12.00	110.24	477.47	
4	7500.79	90.00	110.24	5487.00	-767.71	2081.66	0.00	0.00	2218.72	PBHL#1[HT36#2H]



Azimuths to Grid North
True North -0.21°
Magnetic North: 7.98°

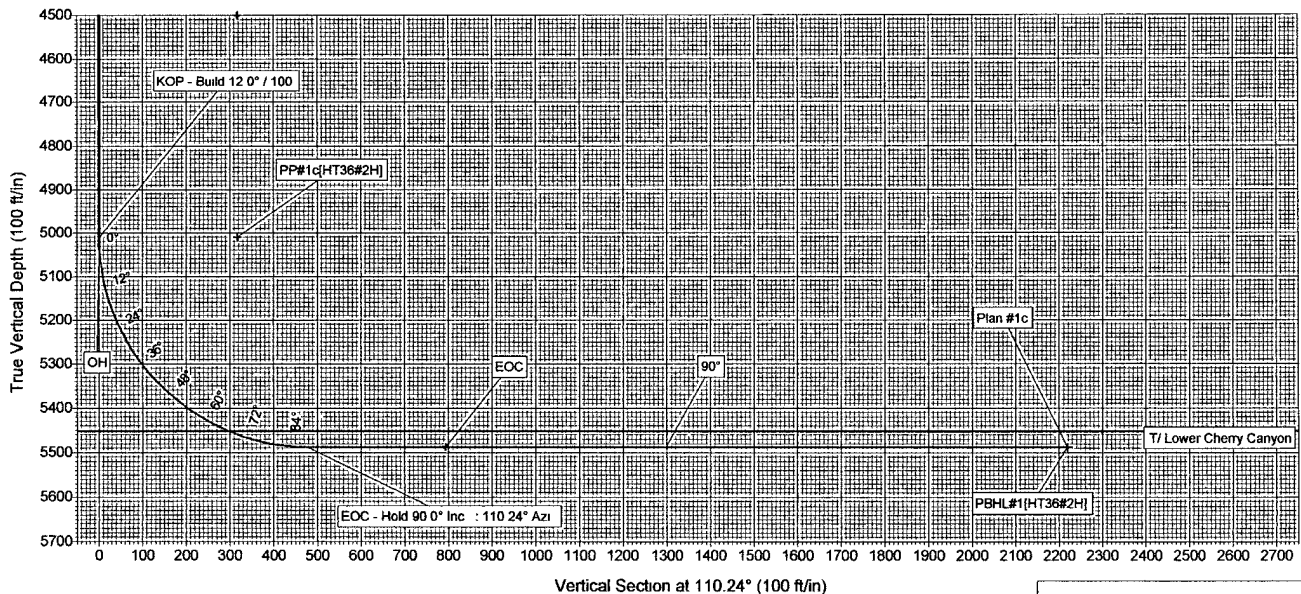
Magnetic Field
Strength 48978.4nT
Dip Angle 60.18°
Date 8/17/2007
Model IGRF200510

ANNOTATIONS

TVD	MD	Annotation
5009.53	5009.53	KOP - Build 12.0° / 100
5487.00	5759.54	EOC - Hold 90.0° Inc 110.24° Azi

PROJECT DETAILS Eddy Co., New Mexico (Nad 83)

Geodetic System US State Plane 1983
Datum North American Datum 1983
Ellipsoid GRS 1980
Zone New Mexico Eastern Zone
System Datum Ground Level



Plan: Plan #1c (Horned Toad 36 State #2H/Lateral #1)
Created By L.D. Burton Date September 28, 2007