

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

Form C-101
May 27, 2004



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

Submit to appropriate District Office

☐ AMENDED REPORT

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

Operator Name and Address BEPCO, L P P O Box 2760 Midland, Texas 79702		OGRID Number 001801
Property Code 35100		API Number 30-015-36200
Property Name Horned Toad 36 State		Well No 3H
Proposed Pool 1 Nash Draw (Delaware, Bone Spring, Avalon Sd)		Proposed Pool 2

Surface Location

UL or lot no G	Section 36	Township 24S	Range 29E	Lot Idn	Feet from the 1881	North/South line North	Feet from the 2225	East/West line East	County Eddy
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Proposed Bottom Hole Location If Different From Surface

UL or lot no A	Section 36	Township 24S	Range 29E	Lot Idn	Feet from the 350	North/South line South	Feet from the 2225	East/West line East	County Eddy
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Additional Well Information

Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3113' GL
Multiple No	Proposed Depth 8290' MD 5487' TVD	Formation Delaware	Contractor Adobe Drilling	Spud Date 3/01/2008
Depth to Groundwater 150'		Distance from nearest fresh water well 2-1/2 miles		Distance from nearest surface water 2 miles
Pit Liner Synthetic ☒ 20 mls thick Clay ☐ Pit Volume 5,000 bbls Drilling Method Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐				

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#	1042' MD	829	Surface
12-1/4"	9-5/8"	36#	3278' MD	864	Surface
8-3/4"	5-1/2"	17#	8290' MD	635	3025'

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 4971' TVD an azimuth of 180°, build angle of 12.00°/100', and a bottom hole target of 8290' MD (lateral displacement +/- 3049') TVD 5478'. See attached directional plan and 8 point drilling plan for details.

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**

Title. **Administrative Assistant**

E-mail Address **machilders@basspet.com**

Date **2-24-2008**

Phone **432-683-2277**

OIL CONSERVATION DIVISION

Approved by

Title

Approval Date

Expiration Date

Conditions of Approval Attached ☒

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

DISTRICT I

1825 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

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-36200	Pool Code 47545	Pool Name Nash Draw (Delaware, Bone Spring, Avalon Sd)
Property Code 35100	Property Name HORNED TOAD "36" STATE	Well Number 3H
OGRID No. 001801	Operator Name BEPCO, L.P.	Elevation 3097'

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		1881	NORTH	2225	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
O	36	24 S	29 E		350	SOUTH	2225	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
120	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°10'33.4" LONG - W103°56'11.9" SPC- N.: 427970.38 E.: 664070.74 (NAD-83) BOTTOM HOLE LOCATION LAT - N32°10'03.13" LONG - W103°56'11.97" SPC- N.: 424911.323 E.: 664078.221 (NAD-83) ACREAGE: 162.96, 164.30, 160.95, 158.82 Dimensions: 1881', 2225', 330', 350' Labels: PROJECT AREA, PRODUCING AREA, S.L., B.H.	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 unleased 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. Signature: <i>Gary E. Gerhard</i> Date: <i>2/29/08</i> Printed Name: Gary E. Gerhard 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. FEBRUARY 11, 2008 Date Surveyed: <i>Feb 11, 2008</i> Signature: <i>Gary L. Jones</i> Professional Surveyor Certificate No: Gary L. Jones 7977 BASIN SURVEYS
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Surface casing to be set into the Rustler below all fresh water sands.

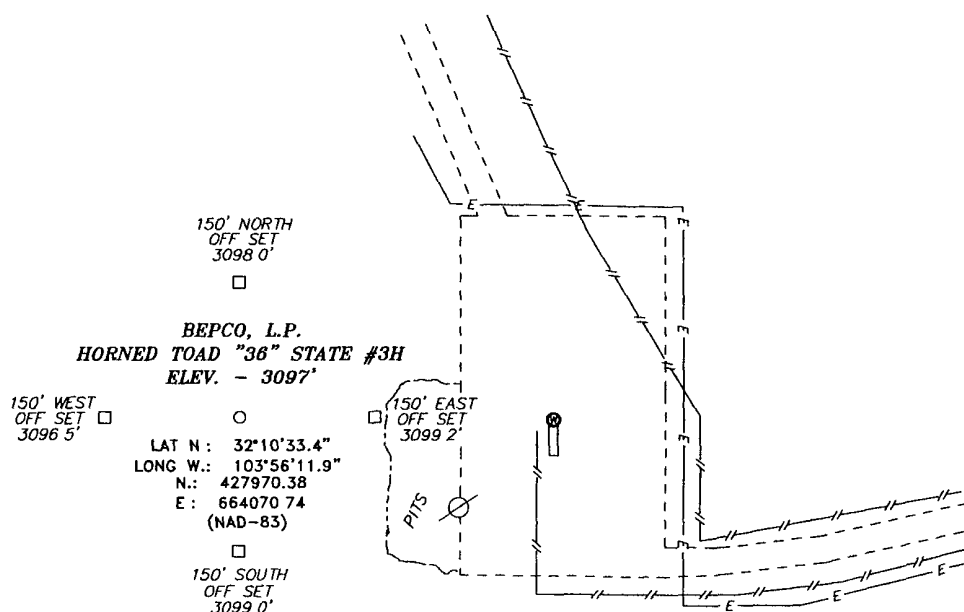
Production casing will be cemented using Halliburton acid soluble cement system in lateral hole with TOC at approximately 3,025' (approximately 250' into intermediate casing).

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.

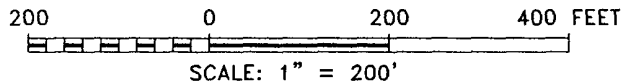
BEPCO, L.P., at P.O. Box 2760, Midland, TX, 79702 is a subsidiary of BEPCO, L.P., 201 Mail Street, Ft. Worth, TX, 76102. Bond No. NM 2204 (Nationwide).

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



DIRECTIONS TO LOCATION

FROM MILE MARKER 23 ON HWY 128, GO WEST 0.5
MILES TO CO RD 787, ON CO RD 787 GO SOUTH
9.6 MILES TO CO RD 746 ON CO RD 746 GO
SOUTHWEST 0.5 MILES THENCE 1.6 MILES WEST ON
LEASE ROAD TO PROPOSED LEASE ROAD



BEPCO, L.P.

REF HORNED TOAD "36" STATE #3H / WELL PAD AND TOPO

THE HORNED TOAD "36" STATE #3H LOCATED 1881'

FROM THE NORTH LINE AND 2225' FROM THE EAST LINE OF
SECTION 36, TOWNSHIP 24 SOUTH, RANGE 29 EAST,

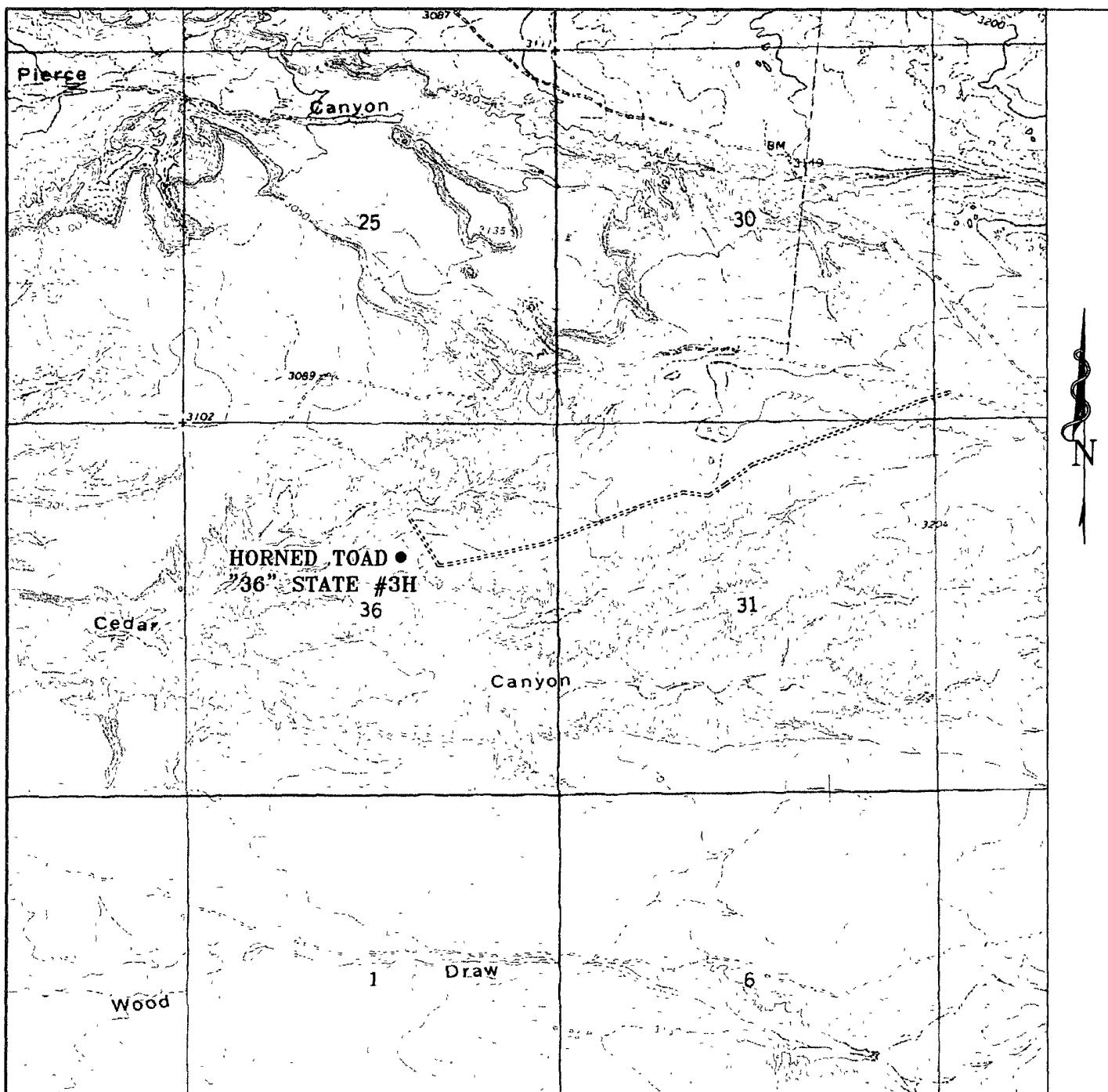
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P O BOX 1786-HOBBS, NEW MEXICO

W.O Number 19226 Drawn By. J. SMALL

Date. 02-11-2008 Disk. 19226W JMS

Survey Date 02-11-2008 Sheet 1 of 1 Sheets



HORNED TOAD "36" STATE #3H

1881' FNL and 2225' 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

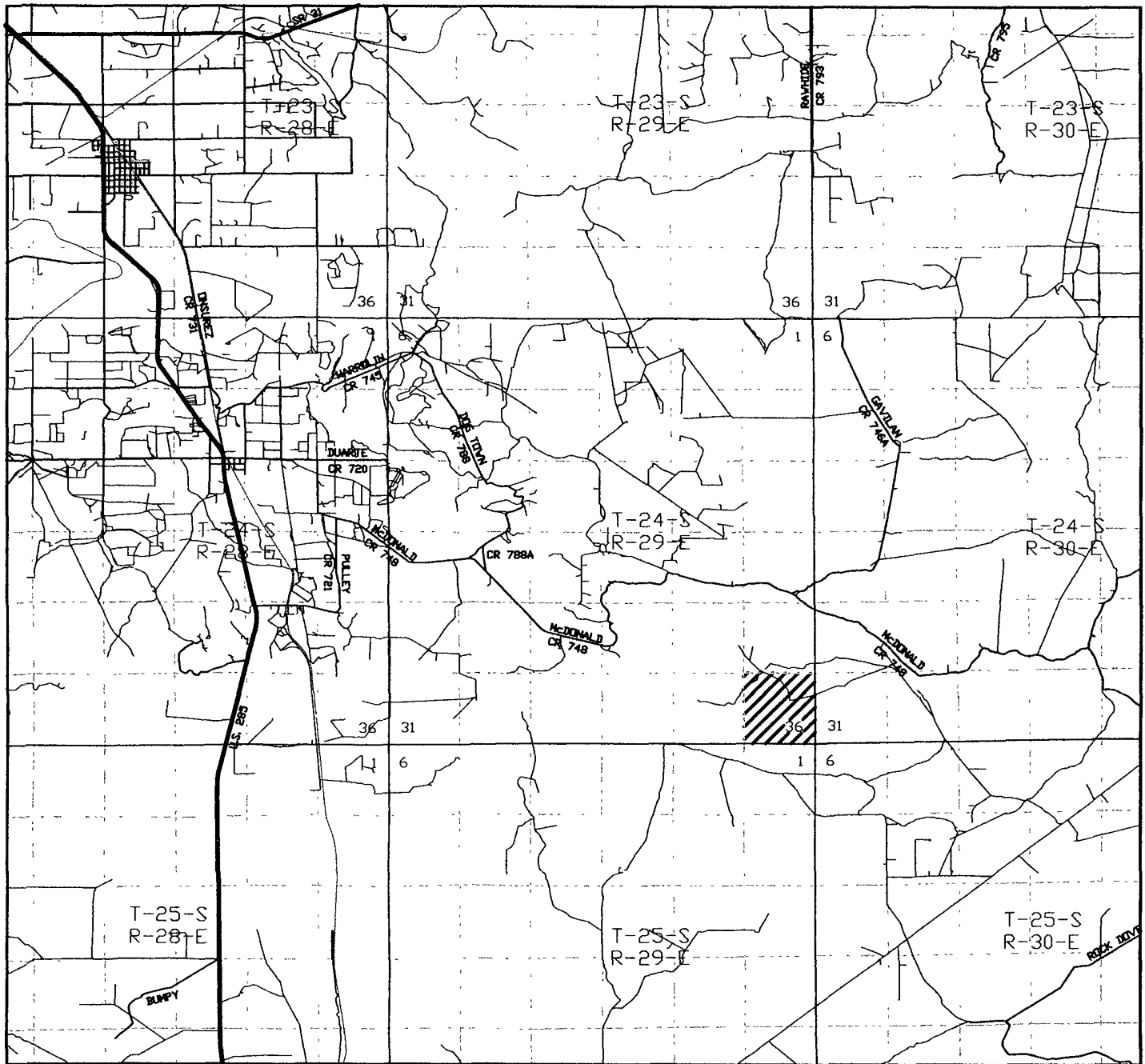
W O Number JMS 19226T

Survey Date 02-11-2008

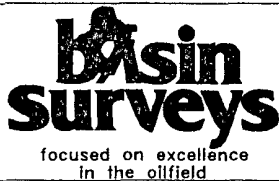
Scale 1" = 2000'

Date 02-11-2008

BEPCO, L.P.



HORNED TOAD "36" STATE #3H
 1881' FNL and 2225' 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 19226TR

Survey Date 02-11-2008

Scale: 1" = 2 MILES

Date. 02-11-2008

BEPCO, L.P.

EIGHT POINT DRILLING PROGRAM BEP CO, L.P.

NAME OF WELL: Horned Toad 36 State #3H

LEGAL DESCRIPTION - SURFACE: 1881' FNL & 2225' FEL, Section 36, T24S, R29E, Eddy County, NM.
BHL: 350' FSL & 2225' 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 3117' (est.)
GL 3097'

FORMATION	ESTIMATED TOP FROM KB		ESTIMATED SUB-SEA TOP	BEARING
	TVD	MD		
T/Rustler	452'	452'	+ 2666'	Barren
B/Rustler	998'	998'	+ 2120'	Barren
T/Salt	1053'	1053'	+ 2065'	Barren
B/Salt	3063'	3063'	+ 55'	Barren
T/Lamar Lime	3278'	3278'	- 160'	Barren
T/Ramsey	3298'	3298'	- 180'	Oil/Gas
KOP (Kick Off Point)	4971'	4971'	- 1853'	NA
T/Lower Cherry Canyon	5448'	5538'	- 2285'	Oil/Gas
LCC Lateral Target	5448'	5868'	- 2330'	Oil/Gas
TD (end of lateral)	5478'	8290'	- 2360'	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, ST&C	0' - 1042'	17-1/2"	Surface	New
9-5/8", 36#, J-55, 8rd, LT&C	0' - 3278'	12-1/4"	Intermediate	New
5-1/2", 17#, P-110, LT&C	0' - 4700'	8-3/4"	Production	New
5-1/2", 17#, P-110, Ultra Flush Jt	4700' - 8290'	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' - 1042'	FW Spud Mud	8.5 – 9.2	38-70	NC	NC	NC	10.0
1042' - 3278'	Brine Water	9.8 – 10.2	28-30	NC	NC	NC	9.5 – 10.5
3278' - 5800'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0
5800' - 8290'	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 3000' 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 – 742' (100% excess Circ to surface)	600	742	Halliburton Light + 2.7 #/sk Salt	10.14	12.8	1.87
Tail: 742' – 1042' (100% excess)	370	300	Premium Plus + 2% CaCl ₂	6.37	14.8	1.35
INTERMEDIATE:						
Lead: 0' – 2778' (100% excess Circ to surface)	600	2778	Interfill C + 0.125 lb/sk Poly-e-flake	16.43	11.5	2.76
Tail: 2778' – 3278' (100% excess)	263	500	Premium Plus + 0.4% Halad-9	6.29	14.8	1.33

PRODUCTION.

Lead: 3028' – 4971' (50% excess circ to surface)	300	1943	50/50 Poz C + 10% D20 + 0.02% D46 + 0.125 pps D130 + 5% D44	14.68	11.8	2.52
Tail: 4971' – 8290' (50% excess)	490	3319	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 4971' at which point a directional hole will be kicked off and drilled at an azimuth of 180°, building angle at 12.00°/100' to a max angle of 90° at a TVD of 5448' (MD 5868'). This 90° angle will be maintained to a MD of 8290' or TVD of 5478'.

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 3298'-5400'. 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

35 days drilling operations

14 days completion operations



Gary E. Gerhard

GEG/vlt
February 25, 2008

B E P C O, L.P.

P. O. Box 2760
Midland, Texas 79702

432-683-2277

FAX-432-687-0329

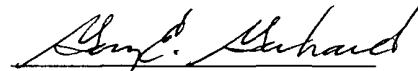
February 25, 2008

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 #3H. 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,



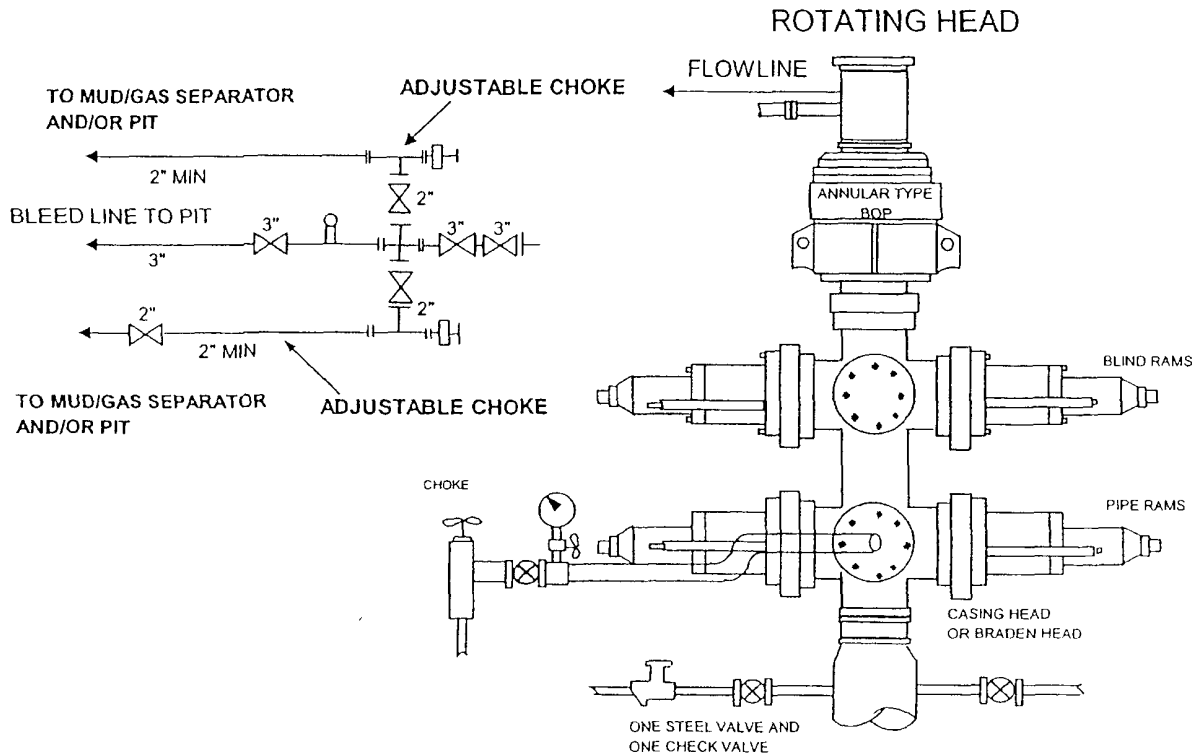
Gary E. Gerhard
Drilling Engineer

GEG/vlt

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

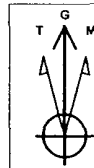


Project: Eddy Co., New Mexico (Nad 83)
 Site: Horned Toad '36' State #3H
 Well: Horned Toad '36' State #3H
 Wellbore: Lateral
 Plan: Plan #1 (Horned Toad '36' State #3H/Lateral)



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: Mean Sea Level



Azimuths to Grid North
 True North: -0.21°
 Magnetic North: 7.92°

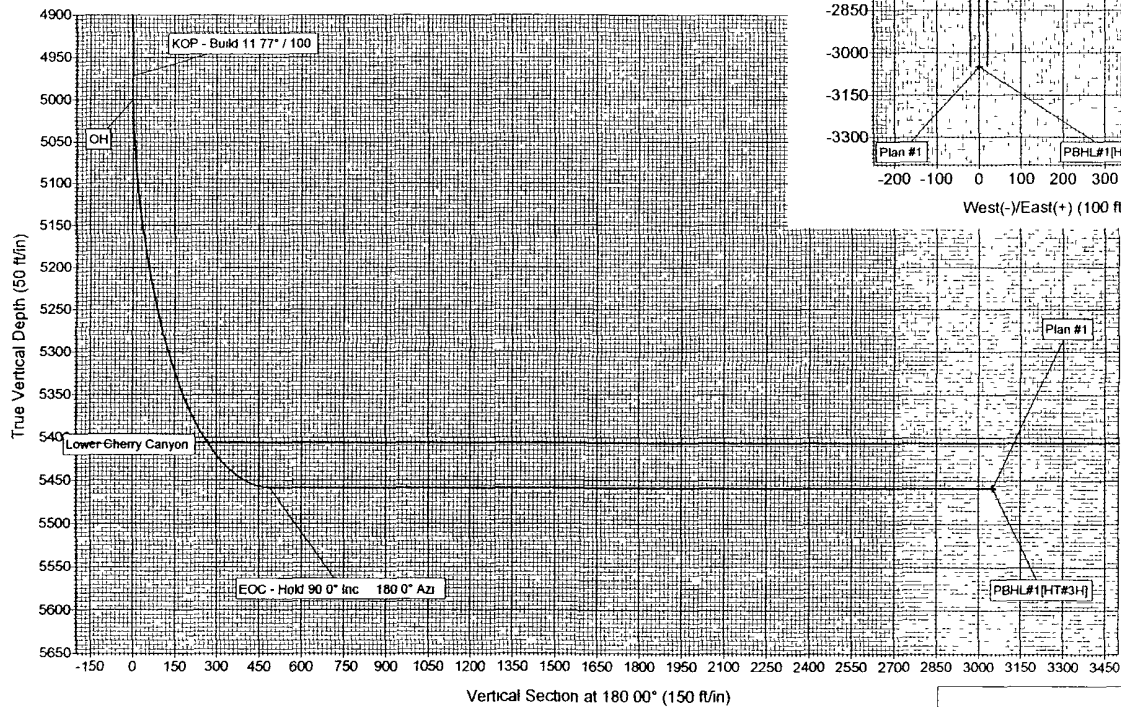
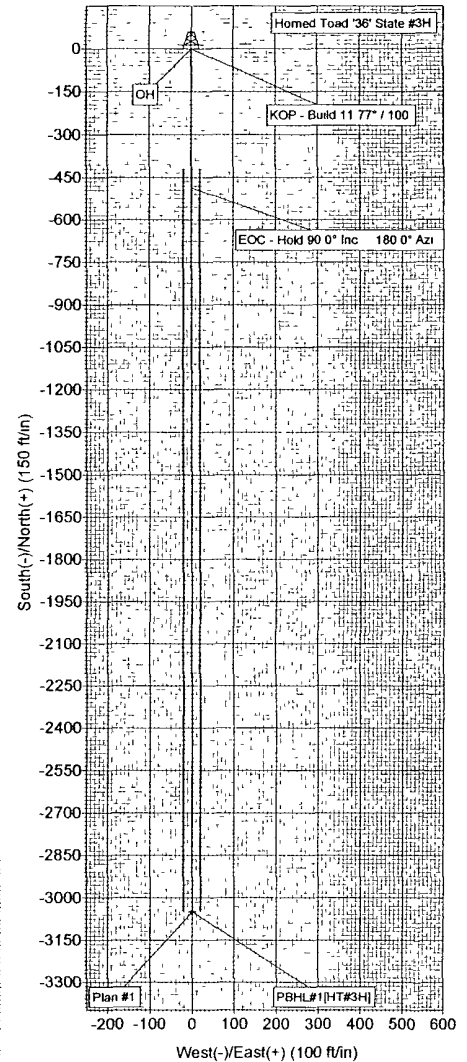
Magnetic Field
 Strength: 48903.4 nT
 Dip Angle: 60.17°
 Date: 02/20/2008
 Model: IGRF200510

ANNOTATIONS

TVD	MD	Annotation
4971.00	4971.00	KOP - Build 11.77° / 100
5458.00	5735.98	EOC - Hold 90.0° Inc 180.0° Azi

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	4970.00	0.00	0.00	4970.00	0.00	0.00	0.00	0.00	0.00	
2	4971.00	0.00	0.00	4971.00	0.00	0.00	0.00	0.00	0.00	
3	5735.98	90.00	180.00	5458.00	-487.00	0.00	11.77	180.00	487.00	
4	8297.98	90.00	180.00	5458.00	-3049.00	0.00	0.00	0.00	3049.00	PBHL#1[HT#3H]



Plan: Plan #1 (Horned Toad '36' State #3H/Lateral)
 Created By: L.D. Burton Date: February 20, 2008



Bass Enterprises Production Co.

Eddy Co., New Mexico (Nad 83)

Horned Toad '36' State #3H

Horned Toad '36' State #3H

Lateral

Plan: Plan #1

Standard Survey Report

20 February, 2008





Black Viper Energy

Survey Report



Company: Bass Enterprises Production Co
Project: Eddy Co., New Mexico (Nad 83)
Site: Horned Toad '36' State #3H
Well: Horned Toad '36' State #3H
Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Horned Toad '36' State #3H
 WELL @ 3097 00ft (Original Well Elev)
 WELL @ 3097 00ft (Original Well Elev)
 Gnd
 Minimum Curvature
 EDM 2003 14 1 0 Server DB

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

Site	Horned Toad '36' State #3H				
Site Position:		Northing:	427,970 38 ft	Latitude:	32° 10' 33 399 N
From:	Map	Easting:	664,070 74 ft	Longitude	103° 56' 11 943 W
Position Uncertainty:	0 00 ft	Slot Radius:	"	Grid Convergence:	0 21 °

Well	Horned Toad '36' State #3H				
Well Position	+N/-S	0 00 ft	Northing:	427,970 38 ft	Latitude: 32° 10' 33 399 N
	+E/-W	0 00 ft	Easting:	664,070 74 ft	Longitude: 103° 56' 11 943 W
Position Uncertainty		0 00 ft	Wellhead Elevation:	ft	Ground Level: 3,097 00 ft

Wellbore	Lateral					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength	
	IGRF200510	02/20/2008	(°)	(°)	(nT)	
			8 13	60 17	48,903	

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	4,970.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	180.00	

Survey Tool Program	Date	02/20/2008				
From	To	Survey (Wellbore)	Tool Name	Description		
(ft)	(ft)					
4,970 00	8,297 98	Plan #1 (Lateral)				

Planned Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
4,970 00	0 00	0 00	4,970 00	0 00	0 00	0 00	0 00	0 00	0 00
4,971 00	0 00	0 00	4,971 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP - Build 11.77° / 100									
4,975 00	0 47	180 00	4,975 00	-0 02	0 00	0 02	11 77	11 77	0 00
5,000 00	3 41	180 00	4,999 98	-0 86	0 00	0 86	11 77	11 77	0 00
5,025 00	6 35	180 00	5,024 89	-2 99	0 00	2 99	11 77	11 77	0 00
5,050 00	9 29	180 00	5,049 65	-6 39	0 00	6 39	11 77	11 77	0 00
5,075 00	12 24	180 00	5,074 21	-11 06	0 00	11 06	11 77	11 77	0 00
5,100 00	15 18	180 00	5,098 50	-16 99	0 00	16 99	11 77	11 77	0 00
5,125 00	18 12	180 00	5,122 45	-24 15	0 00	24 15	11 77	11 77	0 00
5,150 00	21 06	180 00	5,146 00	-32 53	0 00	32 53	11 77	11 77	0 00
5,175 00	24 00	180 00	5,169 09	-42 11	0 00	42 11	11 77	11 77	0 00
5,200 00	26 94	180 00	5,191 65	-52 86	0 00	52 86	11 77	11 77	0 00



Black Viper Energy
Survey Report



Company: Bass Enterprises Production Co
Project: Eddy Co , New Mexico (Nad 83)
Site: Horned Toad '36' State #3H
Well: Horned Toad '36' State #3H
Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference: Well Horned Toad '36' State #3H
TVD Reference: WELL @ 3097 00ft (Original Well Elev)
MD Reference: WELL @ 3097 00ft (Original Well Elev)
North Reference: Gnd
Survey Calculation Method: Minimum Curvature
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)
5,225 00	29 88	180 00	5,213 64	-64 75	0 00	64 75	11 77	11 77	0 00
5,250 00	32 82	180 00	5,234 99	-77 76	0 00	77 76	11 77	11 77	0 00
5,275 00	35 77	180 00	5,255 64	-91 84	0 00	91 84	11 77	11 77	0 00
5,300 00	38 71	180 00	5,275 54	-106 97	0 00	106 97	11 77	11 77	0 00
5,325 00	41 65	180 00	5,294 64	-123 09	0 00	123 09	11 77	11 77	0 00
5,350 00	44 59	180 00	5,312 89	-140 18	0 00	140 18	11 77	11 77	0 00
5,375 00	47 53	180 00	5,330 23	-158 18	0 00	158 18	11 77	11 77	0 00
5,400 00	50 47	180 00	5,346 63	-177 05	0 00	177 05	11 77	11 77	0 00
5,425 00	53 41	180 00	5,362 04	-196 73	0 00	196 73	11 77	11 77	0 00
5,450 00	56 35	180 00	5,376 42	-217 18	0 00	217 18	11 77	11 77	0 00
5,475 00	59 30	180 00	5,389 73	-238 34	0 00	238 34	11 77	11 77	0 00
5,500 00	62 24	180 00	5,401 94	-260 15	0 00	260 15	11 77	11 77	0 00
5,508 87	63 28	180 00	5,406 00	-268 04	0 00	268 04	11 77	11 77	0 00
Lower Cherry Canyon									
5,525 00	65 18	180 00	5,413 01	-282 56	0 00	282 56	11 77	11 77	0 00
5,550 00	68 12	180 00	5,422 92	-305 51	0 00	305 51	11 77	11 77	0 00
5,575 00	71 06	180 00	5,431 64	-328 94	0 00	328 94	11 77	11 77	0 00
5,600 00	74 00	180 00	5,439 14	-352 78	0 00	352 78	11 77	11 77	0 00
5,625 00	76 94	180 00	5,445 41	-376 98	0 00	376 98	11 77	11 77	0 00
5,650 00	79 88	180 00	5,450 43	-401 47	0 00	401 47	11 77	11 77	0 00
5,675 00	82 83	180 00	5,454 19	-426 18	0 00	426 18	11 77	11 77	0 00
5,700 00	85 77	180 00	5,456 67	-451 05	0 00	451 05	11 77	11 77	0 00
5,725 00	88 71	180 00	5,457 88	-476 02	0 00	476 02	11 77	11 77	0 00
5,735 98	90 00	180 00	5,458 00	-487 00	0 00	487 00	11 76	11 76	0 00
EOC - Hold 90.0° Inc :: 180.0° Azi.									
5,800 00	90 00	180 00	5,458 00	-551 02	0 00	551 02	0 00	0 00	0 00
5,900 00	90 00	180 00	5,458 00	-651 02	0 00	651 02	0 00	0 00	0 00
6,000 00	90 00	180 00	5,458 00	-751 02	0 00	751 02	0 00	0 00	0 00
6,100 00	90 00	180 00	5,458 00	-851 02	0 00	851 02	0 00	0 00	0 00
6,200 00	90 00	180 00	5,458 00	-951 02	0 00	951 02	0 00	0 00	0 00
6,300 00	90 00	180 00	5,458 00	-1,051 02	0 00	1,051 02	0 00	0 00	0 00
6,400 00	90 00	180 00	5,458 00	-1,151 02	0 00	1,151 02	0 00	0 00	0 00
6,500 00	90 00	180 00	5,458 00	-1,251 02	0 00	1,251 02	0 00	0 00	0 00
6,600 00	90 00	180 00	5,458 00	-1,351 02	0 00	1,351 02	0 00	0 00	0 00
6,700 00	90 00	180 00	5,458 00	-1,451 02	0 00	1,451 02	0 00	0 00	0 00
6,800 00	90 00	180 00	5,458 00	-1,551 02	0 00	1,551 02	0 00	0 00	0 00
6,900 00	90 00	180 00	5,458 00	-1,651 02	0 00	1,651 02	0 00	0 00	0 00
7,000 00	90 00	180 00	5,458 00	-1,751 02	0 00	1,751 02	0 00	0 00	0 00
7,100 00	90 00	180 00	5,458 00	-1,851 02	0 00	1,851 02	0 00	0 00	0 00
7,200 00	90 00	180 00	5,458 00	-1,951 02	0 00	1,951 02	0 00	0 00	0 00
7,300 00	90 00	180 00	5,458 00	-2,051 02	0 00	2,051 02	0 00	0 00	0 00
7,400 00	90 00	180 00	5,458 00	-2,151 02	0 00	2,151 02	0 00	0 00	0 00
7,500 00	90 00	180 00	5,458 00	-2,251 02	0 00	2,251 02	0 00	0 00	0 00
7,600 00	90 00	180 00	5,458 00	-2,351 02	0 00	2,351 02	0 00	0 00	0 00
7,700 00	90 00	180 00	5,458 00	-2,451 02	0 00	2,451 02	0 00	0 00	0 00
7,800 00	90 00	180 00	5,458 00	-2,551 02	0 00	2,551 02	0 00	0 00	0 00
7,900 00	90 00	180 00	5,458 00	-2,651 02	0 00	2,651 02	0 00	0 00	0 00
8,000 00	90 00	180 00	5,458 00	-2,751 02	0 00	2,751 02	0 00	0 00	0 00
8,100 00	90 00	180 00	5,458 00	-2,851 02	0 00	2,851 02	0 00	0 00	0 00
8,200 00	90 00	180 00	5,458 00	-2,951 02	0 00	2,951 02	0 00	0 00	0 00
8,297 98	90 00	180 00	5,458 00	-3,049 00	0 00	3,049 00	0 00	0 00	0 00
PBHL#1[HT#3H]									



Black Viper Energy
Survey Report



Company: Bass Enterprises Production Co
Project: Eddy Co , New Mexico (Nad 83)
Site: Horned Toad '36' State #3H
Well: Horned Toad '36' State #3H
Wellbore: Lateral
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Horned Toad '36' State #3H
WELL @ 3097 00ft (Original Well Elev)
WELL @ 3097 00ft (Original Well Elev)
Gnd
Minimum Curvature
EDM 2003 14 1 0 Server DB

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL#1[HT#3H]	0 00	0 00	5,458 00	-3,049 00	0 00	424,921 38	664,070 74	32° 10' 3 226 N	103° 56' 12 073 W
- plan hits target									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,508 87	5,406 00	Lower Cherry Canyon	Sand	0 00	0 00

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,971 00	4,971 00	0 00	0 00	KOP - Build 11 77° / 100
5,735 98	5,458 00	0 00	0 00	EOC - Hold 90 0° Inc 180 0° Azi

Checked By _____ Approved By _____ Date _____

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt
 Bass Enterprises Production Co.
 Horned Toad '36' State #3H - Plan #1

Eddy Co., New Mexico (Nad 83)
 Horned Toad '36' State #3H

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
4970.00	0.000	0.000	4970.00	0.00 N	0.00 E	0.00
0.00						
4980.00	1.059	180.000	4980.00	0.08 S	0.00 E	0.08
10.59						
4990.00	2.235	180.000	4990.00	0.37 S	0.00 E	0.37
11.77						
5000.00	3.412	180.000	4999.98	0.86 S	0.00 E	0.86
11.77						
5010.00	4.588	180.000	5009.96	1.56 S	0.00 E	1.56
11.77						
5020.00	5.765	180.000	5019.92	2.46 S	0.00 E	2.46
11.77						
5030.00	6.941	180.000	5029.86	3.57 S	0.00 E	3.57
11.77						
5040.00	8.118	180.000	5039.77	4.88 S	0.00 E	4.88
11.77						
5050.00	9.294	180.000	5049.65	6.39 S	0.00 E	6.39
11.77						
5060.00	10.471	180.000	5059.51	8.11 S	0.00 E	8.11
11.77						
5070.00	11.647	180.000	5069.32	10.03 S	0.00 E	10.03
11.77						
5080.00	12.824	180.000	5079.09	12.15 S	0.00 E	12.15
11.77						
5090.00	14.000	180.000	5088.82	14.47 S	0.00 E	14.47
11.77						
5100.00	15.177	180.000	5098.50	16.99 S	0.00 E	16.99
11.77						
5110.00	16.353	180.000	5108.12	19.70 S	0.00 E	19.70
11.77						
5120.00	17.530	180.000	5117.69	22.62 S	0.00 E	22.62
11.77						
5130.00	18.706	180.000	5127.19	25.73 S	0.00 E	25.73
11.77						
5140.00	19.883	180.000	5136.63	29.03 S	0.00 E	29.03
11.77						
5150.00	21.059	180.000	5146.00	32.53 S	0.00 E	32.53
11.77						
5160.00	22.236	180.000	5155.29	36.22 S	0.00 E	36.22
11.77						
5170.00	23.412	180.000	5164.51	40.10 S	0.00 E	40.10
11.77						
5180.00	24.589	180.000	5173.64	44.16 S	0.00 E	44.16
11.77						
5190.00	25.765	180.000	5182.69	48.42 S	0.00 E	48.42
11.77						
5200.00	26.942	180.000	5191.65	52.86 S	0.00 E	52.86
11.77						
5210.00	28.118	180.000	5200.52	57.48 S	0.00 E	57.48
11.77						

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt						
5220.00	29.295	180.000	5209.29	62.28 S	0.00 E	62.28
11.77						
5230.00	30.471	180.000	5217.96	67.26 S	0.00 E	67.26
11.77						
5240.00	31.648	180.000	5226.53	72.42 S	0.00 E	72.42
11.77						
5250.00	32.824	180.000	5234.99	77.76 S	0.00 E	77.76
11.77						
5260.00	34.001	180.000	5243.33	83.26 S	0.00 E	83.26
11.77						
5270.00	35.177	180.000	5251.57	88.94 S	0.00 E	88.94
11.77						
5280.00	36.354	180.000	5259.68	94.78 S	0.00 E	94.78
11.77						
5290.00	37.531	180.000	5267.67	100.79 S	0.00 E	100.79
11.77						
5300.00	38.707	180.000	5275.54	106.97 S	0.00 E	106.97
11.77						
5310.00	39.884	180.000	5283.28	113.30 S	0.00 E	113.30
11.77						
5320.00	41.060	180.000	5290.89	119.79 S	0.00 E	119.79
11.77						
5330.00	42.237	180.000	5298.36	126.44 S	0.00 E	126.44
11.77						
5340.00	43.413	180.000	5305.69	133.23 S	0.00 E	133.23
11.77						
5350.00	44.590	180.000	5312.89	140.18 S	0.00 E	140.18
11.77						
5360.00	45.766	180.000	5319.93	147.27 S	0.00 E	147.27
11.77						
5370.00	46.943	180.000	5326.84	154.51 S	0.00 E	154.51
11.77						
5380.00	48.119	180.000	5333.59	161.89 S	0.00 E	161.89
11.77						
5390.00	49.296	180.000	5340.19	169.40 S	0.00 E	169.40
11.77						
5400.00	50.472	180.000	5346.63	177.05 S	0.00 E	177.05
11.77						
5410.00	51.649	180.000	5352.91	184.82 S	0.00 E	184.82
11.77						
5420.00	52.825	180.000	5359.04	192.73 S	0.00 E	192.73
11.77						
5430.00	54.002	180.000	5365.00	200.76 S	0.00 E	200.76
11.77						
5440.00	55.178	180.000	5370.79	208.91 S	0.00 E	208.91
11.77						
5450.00	56.355	180.000	5376.42	217.18 S	0.00 E	217.18
11.77						
5460.00	57.531	180.000	5381.87	225.56 S	0.00 E	225.56
11.77						
5470.00	58.708	180.000	5387.15	234.05 S	0.00 E	234.05
11.77						
5480.00	59.884	180.000	5392.26	242.65 S	0.00 E	242.65
11.77						
5490.00	61.061	180.000	5397.19	251.35 S	0.00 E	251.35
11.77						
5500.00	62.237	180.000	5401.94	260.15 S	0.00 E	260.15
11.77						
5510.00	63.414	180.000	5406.50	269.04 S	0.00 E	269.04
11.77						
5520.00	64.590	180.000	5410.89	278.03 S	0.00 E	278.03
11.77						
5530.00	65.767	180.000	5415.09	287.11 S	0.00 E	287.11

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11.77							
5540.00	66.943	180.000	5419.10	296.27	S	0.00	E 296.27
11.77							
5550.00	68.120	180.000	5422.92	305.51	S	0.00	E 305.51
11.77							
5560.00	69.296	180.000	5426.55	314.83	S	0.00	E 314.83
11.77							
5570.00	70.473	180.000	5429.99	324.22	S	0.00	E 324.22
11.77							
5580.00	71.649	180.000	5433.23	333.68	S	0.00	E 333.68
11.77							
5590.00	72.826	180.000	5436.28	343.20	S	0.00	E 343.20
11.77							
5600.00	74.002	180.000	5439.14	352.78	S	0.00	E 352.78
11.77							
5610.00	75.179	180.000	5441.80	362.42	S	0.00	E 362.42
11.77							
5620.00	76.355	180.000	5444.26	372.12	S	0.00	E 372.12
11.77							
5630.00	77.532	180.000	5446.51	381.86	S	0.00	E 381.86
11.77							
5640.00	78.708	180.000	5448.57	391.64	S	0.00	E 391.64
11.77							
5650.00	79.885	180.000	5450.43	401.47	S	0.00	E 401.47
11.77							
5660.00	81.061	180.000	5452.09	411.33	S	0.00	E 411.33
11.77							
5670.00	82.238	180.000	5453.54	421.22	S	0.00	E 421.22
11.77							
5680.00	83.414	180.000	5454.79	431.15	S	0.00	E 431.15
11.77							
5690.00	84.591	180.000	5455.83	441.09	S	0.00	E 441.09
11.77							
5700.00	85.767	180.000	5456.67	451.05	S	0.00	E 451.05
11.77							
5710.00	86.944	180.000	5457.31	461.03	S	0.00	E 461.03
11.77							
5720.00	88.120	180.000	5457.74	471.03	S	0.00	E 471.03
11.77							
5730.00	89.297	180.000	5457.96	481.02	S	0.00	E 481.02
11.77							
5740.00	90.000	180.000	5458.00	491.02	S	0.00	E 491.02
7.03							
5750.00	90.000	180.000	5458.00	501.02	S	0.00	E 501.02
0.00							
5760.00	90.000	180.000	5458.00	511.02	S	0.00	E 511.02
0.00							
5770.00	90.000	180.000	5458.00	521.02	S	0.00	E 521.02
0.00							
5780.00	90.000	180.000	5458.00	531.02	S	0.00	E 531.02
0.00							
5790.00	90.000	180.000	5458.00	541.02	S	0.00	E 541.02
0.00							
5800.00	90.000	180.000	5458.00	551.02	S	0.00	E 551.02
0.00							
5810.00	90.000	180.000	5458.00	561.02	S	0.00	E 561.02
0.00							
5820.00	90.000	180.000	5458.00	571.02	S	0.00	E 571.02
0.00							
5830.00	90.000	180.000	5458.00	581.02	S	0.00	E 581.02
0.00							
5840.00	90.000	180.000	5458.00	591.02	S	0.00	E 591.02
0.00							

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt						
5850.00	90.000	180.000	5458.00	601.02 S	0.00 E	601.02
0.00						
5860.00	90.000	180.000	5458.00	611.02 S	0.00 E	611.02
0.00						
5870.00	90.000	180.000	5458.00	621.02 S	0.00 E	621.02
0.00						
5880.00	90.000	180.000	5458.00	631.02 S	0.00 E	631.02
0.00						
5890.00	90.000	180.000	5458.00	641.02 S	0.00 E	641.02
0.00						
5900.00	90.000	180.000	5458.00	651.02 S	0.00 E	651.02
0.00						
5910.00	90.000	180.000	5458.00	661.02 S	0.00 E	661.02
0.00						
5920.00	90.000	180.000	5458.00	671.02 S	0.00 E	671.02
0.00						
5930.00	90.000	180.000	5458.00	681.02 S	0.00 E	681.02
0.00						
5940.00	90.000	180.000	5458.00	691.02 S	0.00 E	691.02
0.00						
5950.00	90.000	180.000	5458.00	701.02 S	0.00 E	701.02
0.00						
5960.00	90.000	180.000	5458.00	711.02 S	0.00 E	711.02
0.00						
5970.00	90.000	180.000	5458.00	721.02 S	0.00 E	721.02
0.00						
5980.00	90.000	180.000	5458.00	731.02 S	0.00 E	731.02
0.00						
5990.00	90.000	180.000	5458.00	741.02 S	0.00 E	741.02
0.00						
6000.00	90.000	180.000	5458.00	751.02 S	0.00 E	751.02
0.00						
6010.00	90.000	180.000	5458.00	761.02 S	0.00 E	761.02
0.00						
6020.00	90.000	180.000	5458.00	771.02 S	0.00 E	771.02
0.00						
6030.00	90.000	180.000	5458.00	781.02 S	0.00 E	781.02
0.00						
6040.00	90.000	180.000	5458.00	791.02 S	0.00 E	791.02
0.00						
6050.00	90.000	180.000	5458.00	801.02 S	0.00 E	801.02
0.00						
6060.00	90.000	180.000	5458.00	811.02 S	0.00 E	811.02
0.00						
6070.00	90.000	180.000	5458.00	821.02 S	0.00 E	821.02
0.00						
6080.00	90.000	180.000	5458.00	831.02 S	0.00 E	831.02
0.00						
6090.00	90.000	180.000	5458.00	841.02 S	0.00 E	841.02
0.00						
6100.00	90.000	180.000	5458.00	851.02 S	0.00 E	851.02
0.00						
6110.00	90.000	180.000	5458.00	861.02 S	0.00 E	861.02
0.00						
6120.00	90.000	180.000	5458.00	871.02 S	0.00 E	871.02
0.00						
6130.00	90.000	180.000	5458.00	881.02 S	0.00 E	881.02
0.00						
6140.00	90.000	180.000	5458.00	891.02 S	0.00 E	891.02
0.00						
6150.00	90.000	180.000	5458.00	901.02 S	0.00 E	901.02
0.00						
6160.00	90.000	180.000	5458.00	911.02 S	0.00 E	911.02

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0.00							
6170.00	90.000	180.000	5458.00	921.02 S	0.00 E	921.02	
0.00							
6180.00	90.000	180.000	5458.00	931.02 S	0.00 E	931.02	
0.00							
6190.00	90.000	180.000	5458.00	941.02 S	0.00 E	941.02	
0.00							
6200.00	90.000	180.000	5458.00	951.02 S	0.00 E	951.02	
0.00							
6210.00	90.000	180.000	5458.00	961.02 S	0.00 E	961.02	
0.00							
6220.00	90.000	180.000	5458.00	971.02 S	0.00 E	971.02	
0.00							
6230.00	90.000	180.000	5458.00	981.02 S	0.00 E	981.02	
0.00							
6240.00	90.000	180.000	5458.00	991.02 S	0.00 E	991.02	
0.00							
6250.00	90.000	180.000	5458.00	1001.02 S	0.00 E	1001.02	
0.00							
6260.00	90.000	180.000	5458.00	1011.02 S	0.00 E	1011.02	
0.00							
6270.00	90.000	180.000	5458.00	1021.02 S	0.00 E	1021.02	
0.00							
6280.00	90.000	180.000	5458.00	1031.02 S	0.00 E	1031.02	
0.00							
6290.00	90.000	180.000	5458.00	1041.02 S	0.00 E	1041.02	
0.00							
6300.00	90.000	180.000	5458.00	1051.02 S	0.00 E	1051.02	
0.00							
6310.00	90.000	180.000	5458.00	1061.02 S	0.00 E	1061.02	
0.00							
6320.00	90.000	180.000	5458.00	1071.02 S	0.00 E	1071.02	
0.00							
6330.00	90.000	180.000	5458.00	1081.02 S	0.00 E	1081.02	
0.00							
6340.00	90.000	180.000	5458.00	1091.02 S	0.00 E	1091.02	
0.00							
6350.00	90.000	180.000	5458.00	1101.02 S	0.00 E	1101.02	
0.00							
6360.00	90.000	180.000	5458.00	1111.02 S	0.00 E	1111.02	
0.00							
6370.00	90.000	180.000	5458.00	1121.02 S	0.00 E	1121.02	
0.00							
6380.00	90.000	180.000	5458.00	1131.02 S	0.00 E	1131.02	
0.00							
6390.00	90.000	180.000	5458.00	1141.02 S	0.00 E	1141.02	
0.00							
6400.00	90.000	180.000	5458.00	1151.02 S	0.00 E	1151.02	
0.00							
6410.00	90.000	180.000	5458.00	1161.02 S	0.00 E	1161.02	
0.00							
6420.00	90.000	180.000	5458.00	1171.02 S	0.00 E	1171.02	
0.00							
6430.00	90.000	180.000	5458.00	1181.02 S	0.00 E	1181.02	
0.00							
6440.00	90.000	180.000	5458.00	1191.02 S	0.00 E	1191.02	
0.00							
6450.00	90.000	180.000	5458.00	1201.02 S	0.00 E	1201.02	
0.00							
6460.00	90.000	180.000	5458.00	1211.02 S	0.00 E	1211.02	
0.00							
6470.00	90.000	180.000	5458.00	1221.02 S	0.00 E	1221.02	
0.00							

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt							
6480.00	90.000	180.000	5458.00	1231.02	S	0.00	E 1231.02
0.00							
6490.00	90.000	180.000	5458.00	1241.02	S	0.00	E 1241.02
0.00							
6500.00	90.000	180.000	5458.00	1251.02	S	0.00	E 1251.02
0.00							
6510.00	90.000	180.000	5458.00	1261.02	S	0.00	E 1261.02
0.00							
6520.00	90.000	180.000	5458.00	1271.02	S	0.00	E 1271.02
0.00							
6530.00	90.000	180.000	5458.00	1281.02	S	0.00	E 1281.02
0.00							
6540.00	90.000	180.000	5458.00	1291.02	S	0.00	E 1291.02
0.00							
6550.00	90.000	180.000	5458.00	1301.02	S	0.00	E 1301.02
0.00							
6560.00	90.000	180.000	5458.00	1311.02	S	0.00	E 1311.02
0.00							
6570.00	90.000	180.000	5458.00	1321.02	S	0.00	E 1321.02
0.00							
6580.00	90.000	180.000	5458.00	1331.02	S	0.00	E 1331.02
0.00							
6590.00	90.000	180.000	5458.00	1341.02	S	0.00	E 1341.02
0.00							
6600.00	90.000	180.000	5458.00	1351.02	S	0.00	E 1351.02
0.00							
6610.00	90.000	180.000	5458.00	1361.02	S	0.00	E 1361.02
0.00							
6620.00	90.000	180.000	5458.00	1371.02	S	0.00	E 1371.02
0.00							
6630.00	90.000	180.000	5458.00	1381.02	S	0.00	E 1381.02
0.00							
6640.00	90.000	180.000	5458.00	1391.02	S	0.00	E 1391.02
0.00							
6650.00	90.000	180.000	5458.00	1401.02	S	0.00	E 1401.02
0.00							
6660.00	90.000	180.000	5458.00	1411.02	S	0.00	E 1411.02
0.00							
6670.00	90.000	180.000	5458.00	1421.02	S	0.00	E 1421.02
0.00							
6680.00	90.000	180.000	5458.00	1431.02	S	0.00	E 1431.02
0.00							
6690.00	90.000	180.000	5458.00	1441.02	S	0.00	E 1441.02
0.00							
6700.00	90.000	180.000	5458.00	1451.02	S	0.00	E 1451.02
0.00							
6710.00	90.000	180.000	5458.00	1461.02	S	0.00	E 1461.02
0.00							
6720.00	90.000	180.000	5458.00	1471.02	S	0.00	E 1471.02
0.00							
6730.00	90.000	180.000	5458.00	1481.02	S	0.00	E 1481.02
0.00							
6740.00	90.000	180.000	5458.00	1491.02	S	0.00	E 1491.02
0.00							
6750.00	90.000	180.000	5458.00	1501.02	S	0.00	E 1501.02
0.00							
6760.00	90.000	180.000	5458.00	1511.02	S	0.00	E 1511.02
0.00							
6770.00	90.000	180.000	5458.00	1521.02	S	0.00	E 1521.02
0.00							
6780.00	90.000	180.000	5458.00	1531.02	S	0.00	E 1531.02
0.00							
6790.00	90.000	180.000	5458.00	1541.02	S	0.00	E 1541.02

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0.00							
6800.00	90.000	180.000	5458.00	1551.02	S	0.00	E 1551.02
0.00							
6810.00	90.000	180.000	5458.00	1561.02	S	0.00	E 1561.02
0.00							
6820.00	90.000	180.000	5458.00	1571.02	S	0.00	E 1571.02
0.00							
6830.00	90.000	180.000	5458.00	1581.02	S	0.00	E 1581.02
0.00							
6840.00	90.000	180.000	5458.00	1591.02	S	0.00	E 1591.02
0.00							
6850.00	90.000	180.000	5458.00	1601.02	S	0.00	E 1601.02
0.00							
6860.00	90.000	180.000	5458.00	1611.02	S	0.00	E 1611.02
0.00							
6870.00	90.000	180.000	5458.00	1621.02	S	0.00	E 1621.02
0.00							
6880.00	90.000	180.000	5458.00	1631.02	S	0.00	E 1631.02
0.00							
6890.00	90.000	180.000	5458.00	1641.02	S	0.00	E 1641.02
0.00							
6900.00	90.000	180.000	5458.00	1651.02	S	0.00	E 1651.02
0.00							
6910.00	90.000	180.000	5458.00	1661.02	S	0.00	E 1661.02
0.00							
6920.00	90.000	180.000	5458.00	1671.02	S	0.00	E 1671.02
0.00							
6930.00	90.000	180.000	5458.00	1681.02	S	0.00	E 1681.02
0.00							
6940.00	90.000	180.000	5458.00	1691.02	S	0.00	E 1691.02
0.00							
6950.00	90.000	180.000	5458.00	1701.02	S	0.00	E 1701.02
0.00							
6960.00	90.000	180.000	5458.00	1711.02	S	0.00	E 1711.02
0.00							
6970.00	90.000	180.000	5458.00	1721.02	S	0.00	E 1721.02
0.00							
6980.00	90.000	180.000	5458.00	1731.02	S	0.00	E 1731.02
0.00							
6990.00	90.000	180.000	5458.00	1741.02	S	0.00	E 1741.02
0.00							
7000.00	90.000	180.000	5458.00	1751.02	S	0.00	E 1751.02
0.00							
7010.00	90.000	180.000	5458.00	1761.02	S	0.00	E 1761.02
0.00							
7020.00	90.000	180.000	5458.00	1771.02	S	0.00	E 1771.02
0.00							
7030.00	90.000	180.000	5458.00	1781.02	S	0.00	E 1781.02
0.00							
7040.00	90.000	180.000	5458.00	1791.02	S	0.00	E 1791.02
0.00							
7050.00	90.000	180.000	5458.00	1801.02	S	0.00	E 1801.02
0.00							
7060.00	90.000	180.000	5458.00	1811.02	S	0.00	E 1811.02
0.00							
7070.00	90.000	180.000	5458.00	1821.02	S	0.00	E 1821.02
0.00							
7080.00	90.000	180.000	5458.00	1831.02	S	0.00	E 1831.02
0.00							
7090.00	90.000	180.000	5458.00	1841.02	S	0.00	E 1841.02
0.00							
7100.00	90.000	180.000	5458.00	1851.02	S	0.00	E 1851.02
0.00							

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt							
7110.00	90.000	180.000	5458.00	1861.02	S	0.00	E 1861.02
0.00							
7120.00	90.000	180.000	5458.00	1871.02	S	0.00	E 1871.02
0.00							
7130.00	90.000	180.000	5458.00	1881.02	S	0.00	E 1881.02
0.00							
7140.00	90.000	180.000	5458.00	1891.02	S	0.00	E 1891.02
0.00							
7150.00	90.000	180.000	5458.00	1901.02	S	0.00	E 1901.02
0.00							
7160.00	90.000	180.000	5458.00	1911.02	S	0.00	E 1911.02
0.00							
7170.00	90.000	180.000	5458.00	1921.02	S	0.00	E 1921.02
0.00							
7180.00	90.000	180.000	5458.00	1931.02	S	0.00	E 1931.02
0.00							
7190.00	90.000	180.000	5458.00	1941.02	S	0.00	E 1941.02
0.00							
7200.00	90.000	180.000	5458.00	1951.02	S	0.00	E 1951.02
0.00							
7210.00	90.000	180.000	5458.00	1961.02	S	0.00	E 1961.02
0.00							
7220.00	90.000	180.000	5458.00	1971.02	S	0.00	E 1971.02
0.00							
7230.00	90.000	180.000	5458.00	1981.02	S	0.00	E 1981.02
0.00							
7240.00	90.000	180.000	5458.00	1991.02	S	0.00	E 1991.02
0.00							
7250.00	90.000	180.000	5458.00	2001.02	S	0.00	E 2001.02
0.00							
7260.00	90.000	180.000	5458.00	2011.02	S	0.00	E 2011.02
0.00							
7270.00	90.000	180.000	5458.00	2021.02	S	0.00	E 2021.02
0.00							
7280.00	90.000	180.000	5458.00	2031.02	S	0.00	E 2031.02
0.00							
7290.00	90.000	180.000	5458.00	2041.02	S	0.00	E 2041.02
0.00							
7300.00	90.000	180.000	5458.00	2051.02	S	0.00	E 2051.02
0.00							
7310.00	90.000	180.000	5458.00	2061.02	S	0.00	E 2061.02
0.00							
7320.00	90.000	180.000	5458.00	2071.02	S	0.00	E 2071.02
0.00							
7330.00	90.000	180.000	5458.00	2081.02	S	0.00	E 2081.02
0.00							
7340.00	90.000	180.000	5458.00	2091.02	S	0.00	E 2091.02
0.00							
7350.00	90.000	180.000	5458.00	2101.02	S	0.00	E 2101.02
0.00							
7360.00	90.000	180.000	5458.00	2111.02	S	0.00	E 2111.02
0.00							
7370.00	90.000	180.000	5458.00	2121.02	S	0.00	E 2121.02
0.00							
7380.00	90.000	180.000	5458.00	2131.02	S	0.00	E 2131.02
0.00							
7390.00	90.000	180.000	5458.00	2141.02	S	0.00	E 2141.02
0.00							
7400.00	90.000	180.000	5458.00	2151.02	S	0.00	E 2151.02
0.00							
7410.00	90.000	180.000	5458.00	2161.02	S	0.00	E 2161.02
0.00							
7420.00	90.000	180.000	5458.00	2171.02	S	0.00	E 2171.02

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0.00							
7430.00	90.000	180.000	5458.00	2181.02	S	0.00	E 2181.02
0.00							
7440.00	90.000	180.000	5458.00	2191.02	S	0.00	E 2191.02
0.00							
7450.00	90.000	180.000	5458.00	2201.02	S	0.00	E 2201.02
0.00							
7460.00	90.000	180.000	5458.00	2211.02	S	0.00	E 2211.02
0.00							
7470.00	90.000	180.000	5458.00	2221.02	S	0.00	E 2221.02
0.00							
7480.00	90.000	180.000	5458.00	2231.02	S	0.00	E 2231.02
0.00							
7490.00	90.000	180.000	5458.00	2241.02	S	0.00	E 2241.02
0.00							
7500.00	90.000	180.000	5458.00	2251.02	S	0.00	E 2251.02
0.00							
7510.00	90.000	180.000	5458.00	2261.02	S	0.00	E 2261.02
0.00							
7520.00	90.000	180.000	5458.00	2271.02	S	0.00	E 2271.02
0.00							
7530.00	90.000	180.000	5458.00	2281.02	S	0.00	E 2281.02
0.00							
7540.00	90.000	180.000	5458.00	2291.02	S	0.00	E 2291.02
0.00							
7550.00	90.000	180.000	5458.00	2301.02	S	0.00	E 2301.02
0.00							
7560.00	90.000	180.000	5458.00	2311.02	S	0.00	E 2311.02
0.00							
7570.00	90.000	180.000	5458.00	2321.02	S	0.00	E 2321.02
0.00							
7580.00	90.000	180.000	5458.00	2331.02	S	0.00	E 2331.02
0.00							
7590.00	90.000	180.000	5458.00	2341.02	S	0.00	E 2341.02
0.00							
7600.00	90.000	180.000	5458.00	2351.02	S	0.00	E 2351.02
0.00							
7610.00	90.000	180.000	5458.00	2361.02	S	0.00	E 2361.02
0.00							
7620.00	90.000	180.000	5458.00	2371.02	S	0.00	E 2371.02
0.00							
7630.00	90.000	180.000	5458.00	2381.02	S	0.00	E 2381.02
0.00							
7640.00	90.000	180.000	5458.00	2391.02	S	0.00	E 2391.02
0.00							
7650.00	90.000	180.000	5458.00	2401.02	S	0.00	E 2401.02
0.00							
7660.00	90.000	180.000	5458.00	2411.02	S	0.00	E 2411.02
0.00							
7670.00	90.000	180.000	5458.00	2421.02	S	0.00	E 2421.02
0.00							
7680.00	90.000	180.000	5458.00	2431.02	S	0.00	E 2431.02
0.00							
7690.00	90.000	180.000	5458.00	2441.02	S	0.00	E 2441.02
0.00							
7700.00	90.000	180.000	5458.00	2451.02	S	0.00	E 2451.02
0.00							
7710.00	90.000	180.000	5458.00	2461.02	S	0.00	E 2461.02
0.00							
7720.00	90.000	180.000	5458.00	2471.02	S	0.00	E 2471.02
0.00							
7730.00	90.000	180.000	5458.00	2481.02	S	0.00	E 2481.02
0.00							

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7740.00	90.000	180.000	5458.00	2491.02 S	0.00 E	2491.02
0.00						
7750.00	90.000	180.000	5458.00	2501.02 S	0.00 E	2501.02
0.00						
7760.00	90.000	180.000	5458.00	2511.02 S	0.00 E	2511.02
0.00						
7770.00	90.000	180.000	5458.00	2521.02 S	0.00 E	2521.02
0.00						
7780.00	90.000	180.000	5458.00	2531.02 S	0.00 E	2531.02
0.00						
7790.00	90.000	180.000	5458.00	2541.02 S	0.00 E	2541.02
0.00						
7800.00	90.000	180.000	5458.00	2551.02 S	0.00 E	2551.02
0.00						
7810.00	90.000	180.000	5458.00	2561.02 S	0.00 E	2561.02
0.00						
7820.00	90.000	180.000	5458.00	2571.02 S	0.00 E	2571.02
0.00						
7830.00	90.000	180.000	5458.00	2581.02 S	0.00 E	2581.02
0.00						
7840.00	90.000	180.000	5458.00	2591.02 S	0.00 E	2591.02
0.00						
7850.00	90.000	180.000	5458.00	2601.02 S	0.00 E	2601.02
0.00						
7860.00	90.000	180.000	5458.00	2611.02 S	0.00 E	2611.02
0.00						
7870.00	90.000	180.000	5458.00	2621.02 S	0.00 E	2621.02
0.00						
7880.00	90.000	180.000	5458.00	2631.02 S	0.00 E	2631.02
0.00						
7890.00	90.000	180.000	5458.00	2641.02 S	0.00 E	2641.02
0.00						
7900.00	90.000	180.000	5458.00	2651.02 S	0.00 E	2651.02
0.00						
7910.00	90.000	180.000	5458.00	2661.02 S	0.00 E	2661.02
0.00						
7920.00	90.000	180.000	5458.00	2671.02 S	0.00 E	2671.02
0.00						
7930.00	90.000	180.000	5458.00	2681.02 S	0.00 E	2681.02
0.00						
7940.00	90.000	180.000	5458.00	2691.02 S	0.00 E	2691.02
0.00						
7950.00	90.000	180.000	5458.00	2701.02 S	0.00 E	2701.02
0.00						
7960.00	90.000	180.000	5458.00	2711.02 S	0.00 E	2711.02
0.00						
7970.00	90.000	180.000	5458.00	2721.02 S	0.00 E	2721.02
0.00						
7980.00	90.000	180.000	5458.00	2731.02 S	0.00 E	2731.02
0.00						
7990.00	90.000	180.000	5458.00	2741.02 S	0.00 E	2741.02
0.00						
8000.00	90.000	180.000	5458.00	2751.02 S	0.00 E	2751.02
0.00						
8010.00	90.000	180.000	5458.00	2761.02 S	0.00 E	2761.02
0.00						
8020.00	90.000	180.000	5458.00	2771.02 S	0.00 E	2771.02
0.00						
8030.00	90.000	180.000	5458.00	2781.02 S	0.00 E	2781.02
0.00						
8040.00	90.000	180.000	5458.00	2791.02 S	0.00 E	2791.02
0.00						
8050.00	90.000	180.000	5458.00	2801.02 S	0.00 E	2801.02

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt

0.00							
8060.00	90.000	180.000	5458.00	2811.02 S	0.00 E	2811.02	
0.00							
8070.00	90.000	180.000	5458.00	2821.02 S	0.00 E	2821.02	
0.00							
8080.00	90.000	180.000	5458.00	2831.02 S	0.00 E	2831.02	
0.00							
8090.00	90.000	180.000	5458.00	2841.02 S	0.00 E	2841.02	
0.00							
8100.00	90.000	180.000	5458.00	2851.02 S	0.00 E	2851.02	
0.00							
8110.00	90.000	180.000	5458.00	2861.02 S	0.00 E	2861.02	
0.00							
8120.00	90.000	180.000	5458.00	2871.02 S	0.00 E	2871.02	
0.00							
8130.00	90.000	180.000	5458.00	2881.02 S	0.00 E	2881.02	
0.00							
8140.00	90.000	180.000	5458.00	2891.02 S	0.00 E	2891.02	
0.00							
8150.00	90.000	180.000	5458.00	2901.02 S	0.00 E	2901.02	
0.00							
8160.00	90.000	180.000	5458.00	2911.02 S	0.00 E	2911.02	
0.00							
8170.00	90.000	180.000	5458.00	2921.02 S	0.00 E	2921.02	
0.00							
8180.00	90.000	180.000	5458.00	2931.02 S	0.00 E	2931.02	
0.00							
8190.00	90.000	180.000	5458.00	2941.02 S	0.00 E	2941.02	
0.00							
8200.00	90.000	180.000	5458.00	2951.02 S	0.00 E	2951.02	
0.00							
8210.00	90.000	180.000	5458.00	2961.02 S	0.00 E	2961.02	
0.00							
8220.00	90.000	180.000	5458.00	2971.02 S	0.00 E	2971.02	
0.00							
8230.00	90.000	180.000	5458.00	2981.02 S	0.00 E	2981.02	
0.00							
8240.00	90.000	180.000	5458.00	2991.02 S	0.00 E	2991.02	
0.00							
8250.00	90.000	180.000	5458.00	3001.02 S	0.00 E	3001.02	
0.00							
8260.00	90.000	180.000	5458.00	3011.02 S	0.00 E	3011.02	
0.00							
8270.00	90.000	180.000	5458.00	3021.02 S	0.00 E	3021.02	
0.00							
8280.00	90.000	180.000	5458.00	3031.02 S	0.00 E	3031.02	
0.00							
8290.00	90.000	180.000	5458.00	3041.02 S	0.00 E	3041.02	
0.00							
8297.98	90.000	180.000	5458.00	3049.00 S	0.00 E	3049.00	
0.00							

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 180.000° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico

Horned Toad '36' State #3H Lateral Plan #1 Report 2-20-08.txt
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
8297.98ft.,
the Bottom Hole Displacement is 3049.00ft., in the Direction of 180.000°
(Grid).