

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

Submit to appropriate District Office

MAR 04 2008

☐ AMENDED REPORT

OCD-ARTESIA

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

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

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

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 8290' MD 5487' TVD	¹⁸ Formation Delaware	¹⁹ Contractor Adobe Drilling	²⁰ 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' miles thick Clay ☐ Pit Volume 15,000 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 *Annette Childers*

Title: Administrative Assistant

E-mail Address: machilders@basspet.com

Date: 2-29-2008

Phone: 432-683-2277

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: 3/17/08

Expiration Date: 3/17/10

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.

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).

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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	Pool Code 47545	Pool Name Nash Draw (Delaware, Bone Spring, Avalon Sd)
Property Code	Property Name HORNE TOAD "36" STATE	Well Number 3H
OGRID No. 00181	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

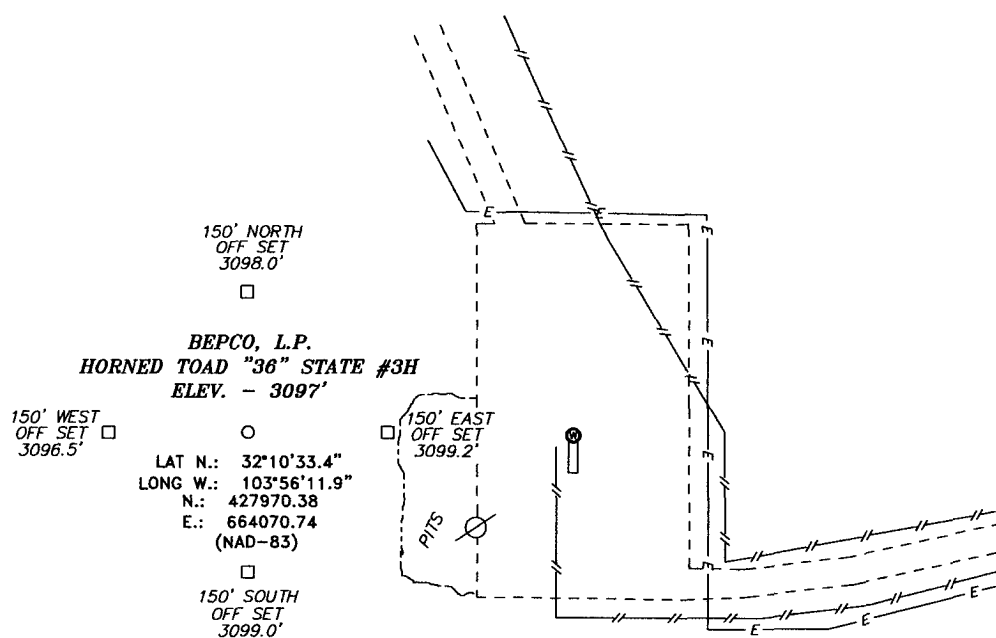
Bottom Hole Location If Different From Surface

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 120	Joint or Infill N	Consolidation Code	Order No.						

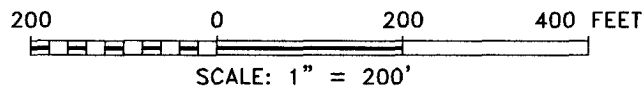
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION LAT - N32°10'33.4" LONG - W103°56'11.9" N.: 427970.38 SPC- E.: 664070.74 (NAD-83) BOTTOM HOLE LOCATION LAT - N32°10'03.13" LONG - W103°56'11.97" N.: 424911.323 SPC- E.: 664078.221 (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> 2/29/08 Signature Date Gary E. Gerhard Printed Name 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>Gary L. Jones</i> Signature & Seal Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS
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NEW MEXICO.



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.

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

W.O. Number: 19226	Drawn By: J. SMALL
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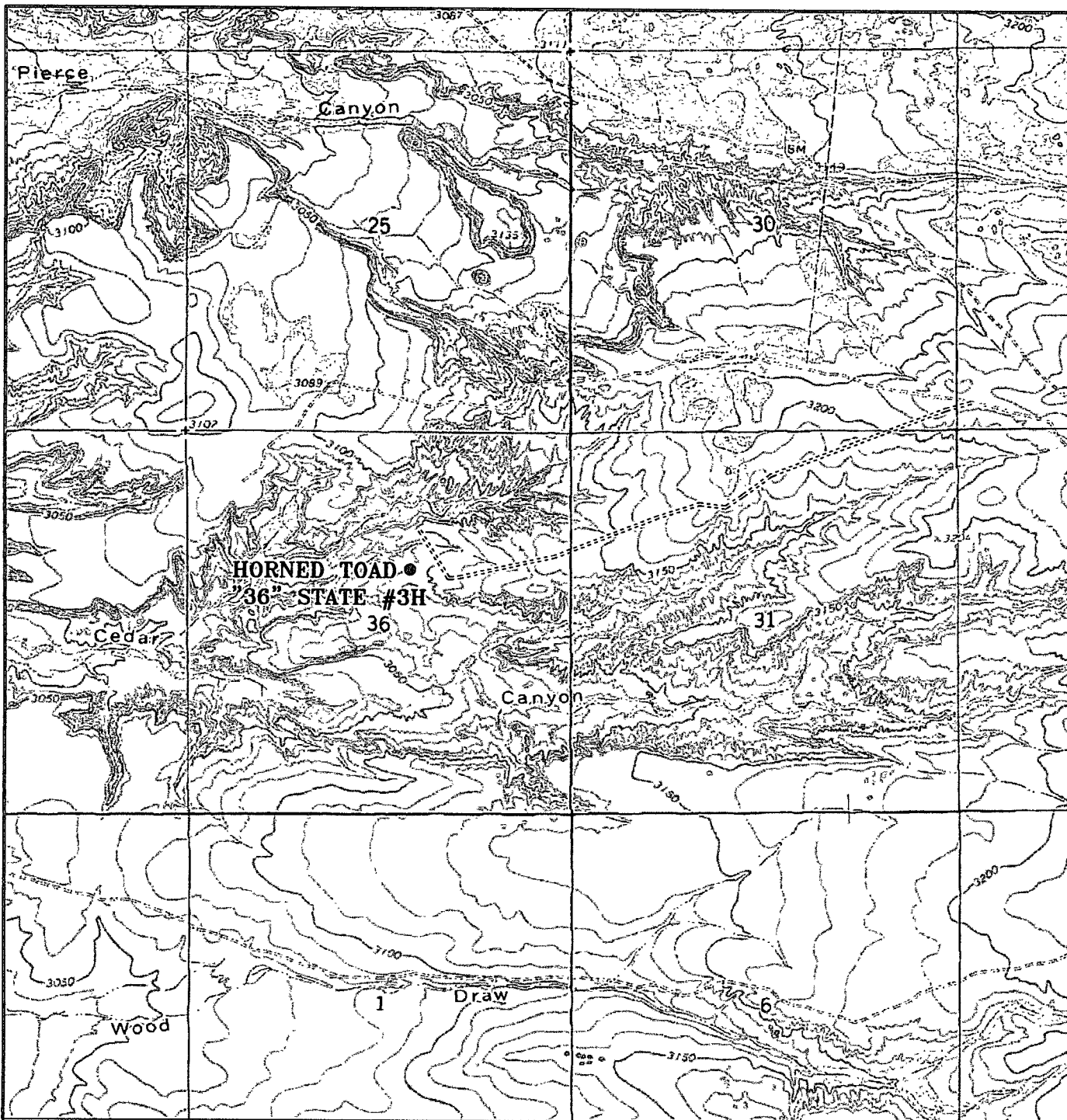
Date: 02-11-2008 Disk: 19226W JMS

BEPCO, L.P.

REF: HORNER 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.

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



HORNER 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

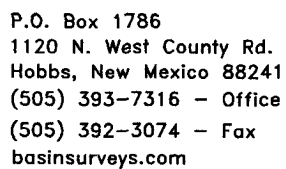
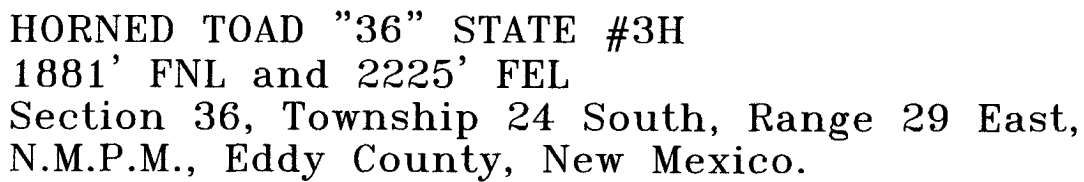
W.O. Number: JMS 19226T

Survey Date: 02-11-2008

Scale: 1" = 2000'

Date: 02-11-2008

BEPCO, L.P.



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'

<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	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

<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' - 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'	300	1943	50/50 Poz C + 10% D20 + 0.02% D46 + 0.125 pps D130 + 5% D44	14.68	11.8	2.52
(50% excess circ to surface)						
Tail: 4971' – 8290'	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
(50% excess)						

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**

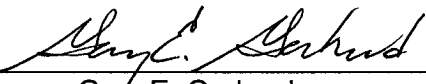
Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

35 days drilling operations

14 days completion operations



Gary E. Gerhard

GEG/vlt
February 25, 2008

BEPCO, L.P.

**P. O. Box 2760
Midland, Texas 79702**

432-683-2277

FAX-432-687-0329

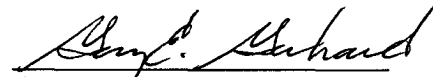
February 25, 2008

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,



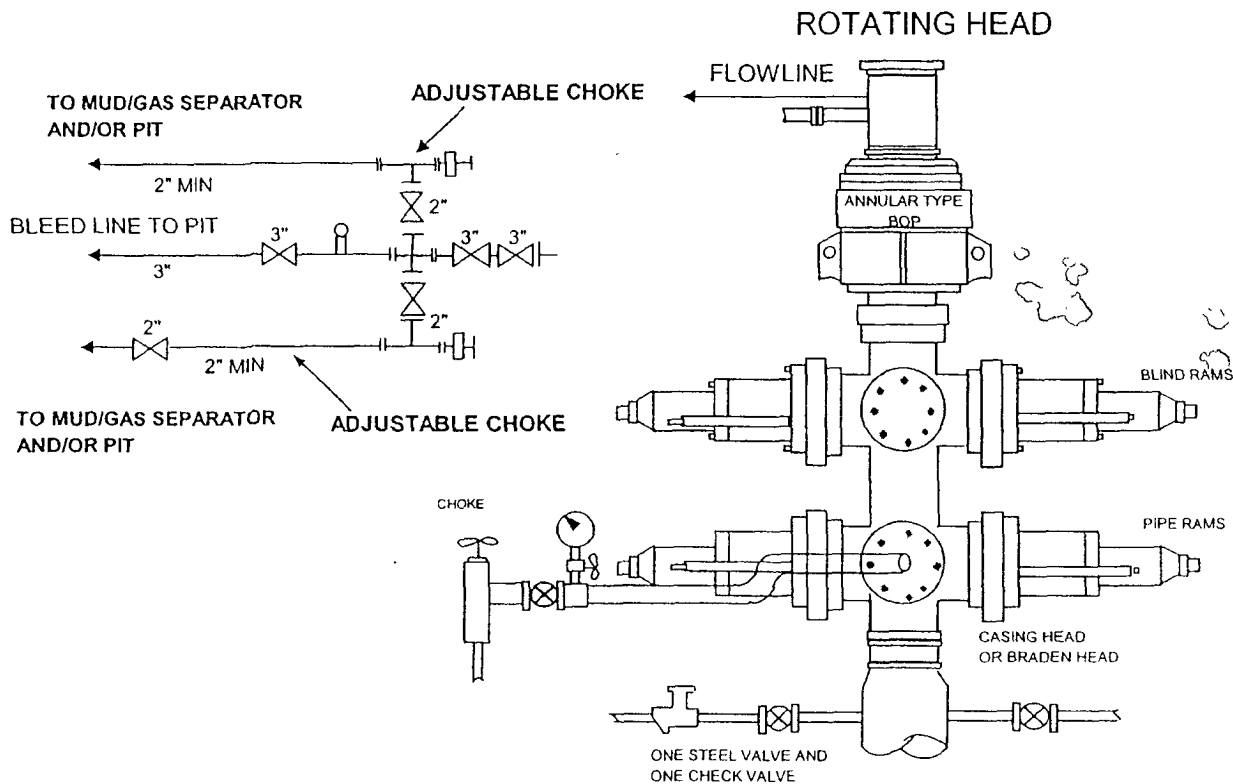
Gary E. Gerhard
Drilling Engineer

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

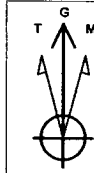


Project Eddy Co., New Mexico (Nad 83)
 Site Horned Toad '36' State #3H
 Well Horned Toad '36' State #3H
 Wellbore Lateral
 Plan. Plan #1 (Horned Toad '36' State #3H/Lateral)



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°

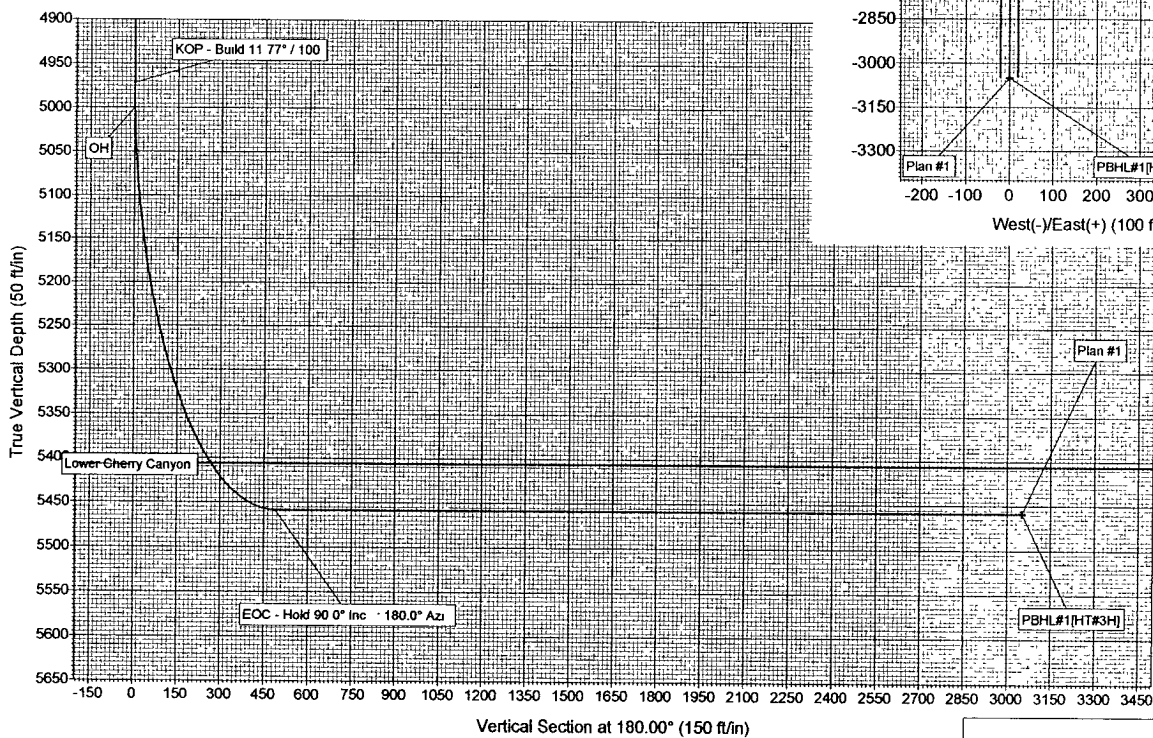
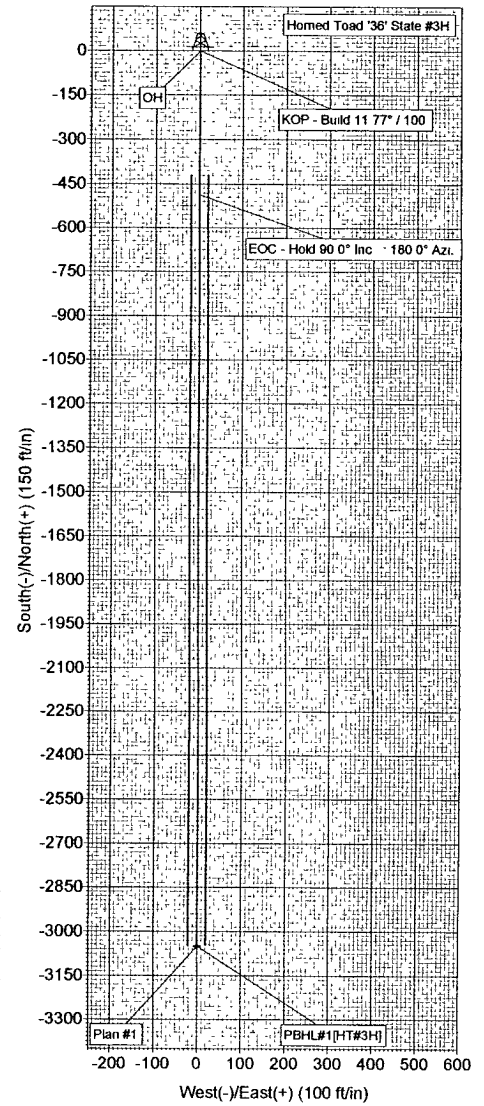
Magnetic Field
 Strength 48903.4 nT
 Dip Angle 60.17°
 Date 02/20/2008
 Model IGRF200510

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 #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: Well Horned Toad '36' State #3H
TVD Reference: WELL @ 3097.00ft (Original Well Elev)
MD Reference: WELL @ 3097.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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
	+E/-W	0.00 ft	Easting:	664,070.74 ft
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	
			(°)	(°)	(nT)	
	IGRF200510	02/20/2008	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 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)
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: Grd
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: 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

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									
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	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
5,508.87	5,406.00	Lower Cherry Canyon	Sand	0.00	0.00

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(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						

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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						

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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	1231.02
0.00						
6490.00	90.000	180.000	5458.00	1241.02	S	1241.02
0.00						
6500.00	90.000	180.000	5458.00	1251.02	S	1251.02
0.00						
6510.00	90.000	180.000	5458.00	1261.02	S	1261.02
0.00						
6520.00	90.000	180.000	5458.00	1271.02	S	1271.02
0.00						
6530.00	90.000	180.000	5458.00	1281.02	S	1281.02
0.00						
6540.00	90.000	180.000	5458.00	1291.02	S	1291.02
0.00						
6550.00	90.000	180.000	5458.00	1301.02	S	1301.02
0.00						
6560.00	90.000	180.000	5458.00	1311.02	S	1311.02
0.00						
6570.00	90.000	180.000	5458.00	1321.02	S	1321.02
0.00						
6580.00	90.000	180.000	5458.00	1331.02	S	1331.02
0.00						
6590.00	90.000	180.000	5458.00	1341.02	S	1341.02
0.00						
6600.00	90.000	180.000	5458.00	1351.02	S	1351.02
0.00						
6610.00	90.000	180.000	5458.00	1361.02	S	1361.02
0.00						
6620.00	90.000	180.000	5458.00	1371.02	S	1371.02
0.00						
6630.00	90.000	180.000	5458.00	1381.02	S	1381.02
0.00						
6640.00	90.000	180.000	5458.00	1391.02	S	1391.02
0.00						
6650.00	90.000	180.000	5458.00	1401.02	S	1401.02
0.00						
6660.00	90.000	180.000	5458.00	1411.02	S	1411.02
0.00						
6670.00	90.000	180.000	5458.00	1421.02	S	1421.02
0.00						
6680.00	90.000	180.000	5458.00	1431.02	S	1431.02
0.00						
6690.00	90.000	180.000	5458.00	1441.02	S	1441.02
0.00						
6700.00	90.000	180.000	5458.00	1451.02	S	1451.02
0.00						
6710.00	90.000	180.000	5458.00	1461.02	S	1461.02
0.00						
6720.00	90.000	180.000	5458.00	1471.02	S	1471.02
0.00						
6730.00	90.000	180.000	5458.00	1481.02	S	1481.02
0.00						
6740.00	90.000	180.000	5458.00	1491.02	S	1491.02
0.00						
6750.00	90.000	180.000	5458.00	1501.02	S	1501.02
0.00						
6760.00	90.000	180.000	5458.00	1511.02	S	1511.02
0.00						
6770.00	90.000	180.000	5458.00	1521.02	S	1521.02
0.00						
6780.00	90.000	180.000	5458.00	1531.02	S	1531.02
0.00						
6790.00	90.000	180.000	5458.00	1541.02	S	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

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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
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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).