

11-949

Form 3160-3
(August 2007)

OCD-HOBBS
HOBBSOCD

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEC 14 2011

APPLICATION FOR PERMIT TO DRILL OR REENTER

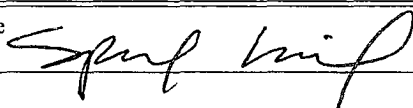
RECEIVED

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMLC #069276	
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Devon Energy Production Company, LP		7. If Unit or CA Agreement, Name and No.	
3a. Address 20 N. Broadway, OKC, OK 73102		8. Lease Name and Well No. <38986> Eischens 29 Federal 1H	
3b. Phone No. (include area code) 405-228-8973		9. API Well No. 30-025-40381	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 330' FSL & 330' FWL, Unit M At proposed prod. zone 330' FNL & 330' FWL, Unit D		10. Field and Pool, or Exploratory Capitan South <13160>	
14. Distance in miles and direction from nearest town or post office* 10 miles southeast of Maljamar, NM.		11. Sec., T. R. M. or Blk. and Survey or Area Section 29 T18S R33E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'		12. County or Parish Lea	
16. No. of acres in lease 2470.16		13. State NM	
17. Spacing Unit dedicated to this well 160 ac			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1045'		20. BLM/BIA Bond No. on file CO-1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3751'		22. Approximate date work will start* 01/01/2012	
		23. Estimated duration 45 days	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Spence Laird	Date 08/10/2011
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Title
Regulatory Analyst

Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date DEC 12 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)


12/20/11

Approval Subject to General Requirements
& Special Stipulations Attached

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

dm

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 15, 2009
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-40381	Pool Code 13160	Pool Name Corbin BONE SPRING South
Property Code 38986	Property Name EISCHENS "29" FEDERAL	Well Number 1H
GRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3751.0

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	29	18 S	33 E		330	SOUTH	330	WEST	LEA

Bottom Hole Location If Different From Surface

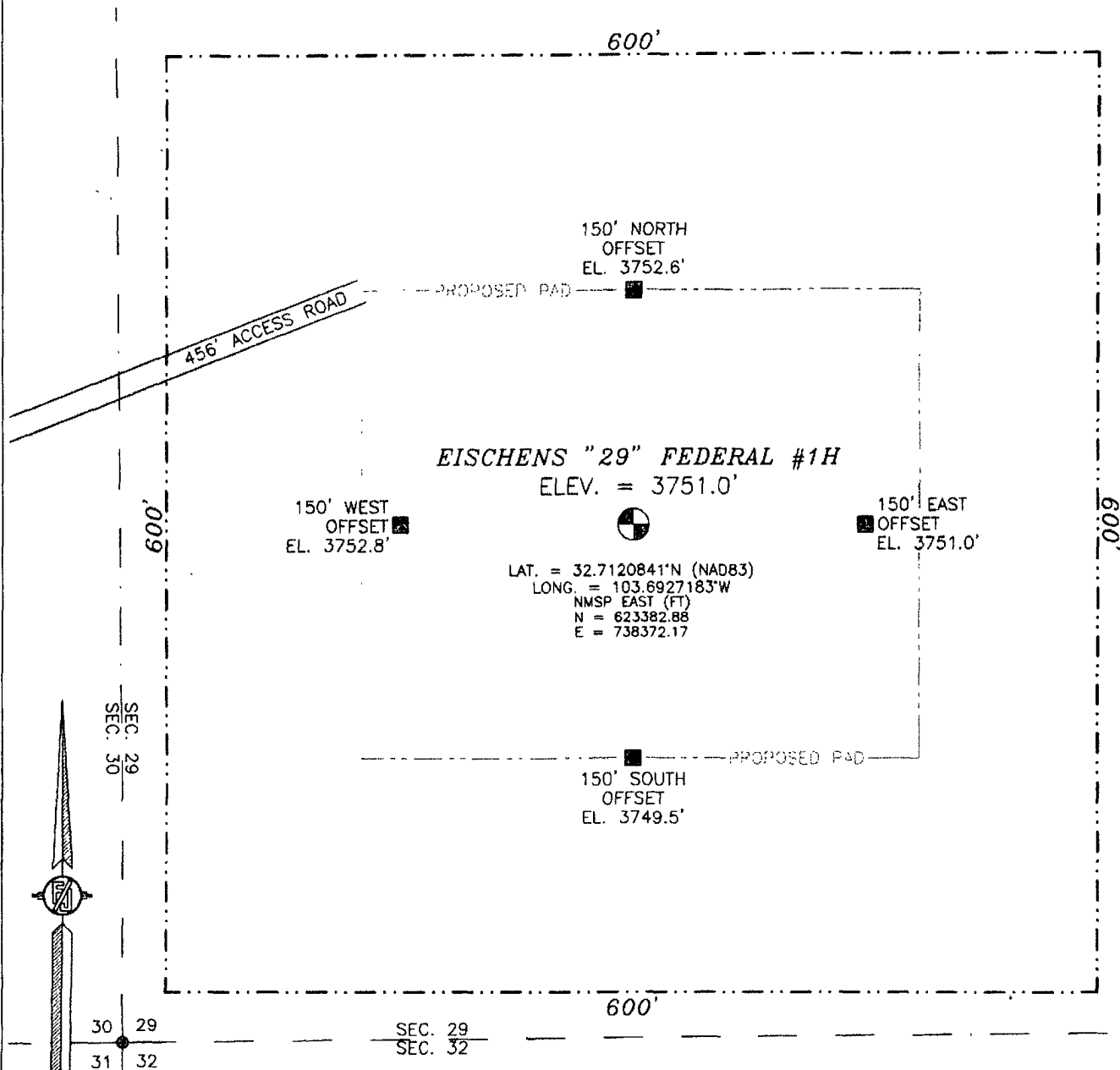
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	29	18 S	33 E		330	NORTH	330	WEST	LEA

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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.

BOTTOM OF HOLE 330' NW CORNER SEC. 24 LAT. = 32.7256818°N LONG. = 103.6938156°W NMSP EAST (FT) N = 628327.96 E = 738004.82	BOTTOM OF HOLE LAT. = 32.7247791°N LONG. = 103.6927413°W NMSP EAST (FT) N = 628001.54 E = 738337.18	NE CORNER SEC. 24 LAT. = 32.7257474°N LONG. = 103.6766214°W NMSP EAST (FT) N = 628384.15 E = 743292.40	17 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 or has a right to drill this well at this 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>Spence Laird</i> Date: 8/10/11 Printed Name: SPENCE LAIRD
SW CORNER SEC. 24 LAT. = 32.7111731°N LONG. = 103.6937893°W NMSP EAST (FT) N = 623049.48 E = 738044.75	EISCHENS "29" FEDERAL #1H ELEV = 3751.0' LAT. = 32.7120841°N (NAD83) LONG. = 103.6927183°W NMSP EAST (FT) N = 623382.88 E = 738372.17	SE CORNER SEC. 24 LAT. = 32.7112334°N LONG. = 103.6766076°W NMSP EAST (FT) N = 623103.70 E = 743329.36	18 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. Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certification Number: FILIMONE JARAMILLO, PLS 12797 SURVEY NO. 462

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM STATE HWY. 529 & PAVED CR#125 (DOG LAKE) GO EAST ON 529 2.6 MILES, TURN RIGHT ON CALICHE ROAD AND GO 2.3 MILES SOUTHWEST, BEND LEFT AND GO SOUTH 1.0 MILES, TURN RIGHT AND GO SOUTHWEST 0.45 MILES, BEND RIGHT AND NORTHWEST 0.5 MILES, TURN LEFT AND GO SOUTH 0.25 MILES, BEND RIGHT AND GO WEST 0.22 MILES, BEND LEFT AND GO SOUTH 0.5 MILES, TURN RIGHT AND GO WEST SOUTHWEST 0.6 MILES, TURN LEFT AND GO SOUTH 0.15 MILES TO A PROPOSED ROAD SURVEY, FOLLOW FLAGS NORTHEAST 456' TO THE NORTHWEST CORNER OF THE PROPOSED PAD FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

EISCHEMS "29" FEDERAL #1H

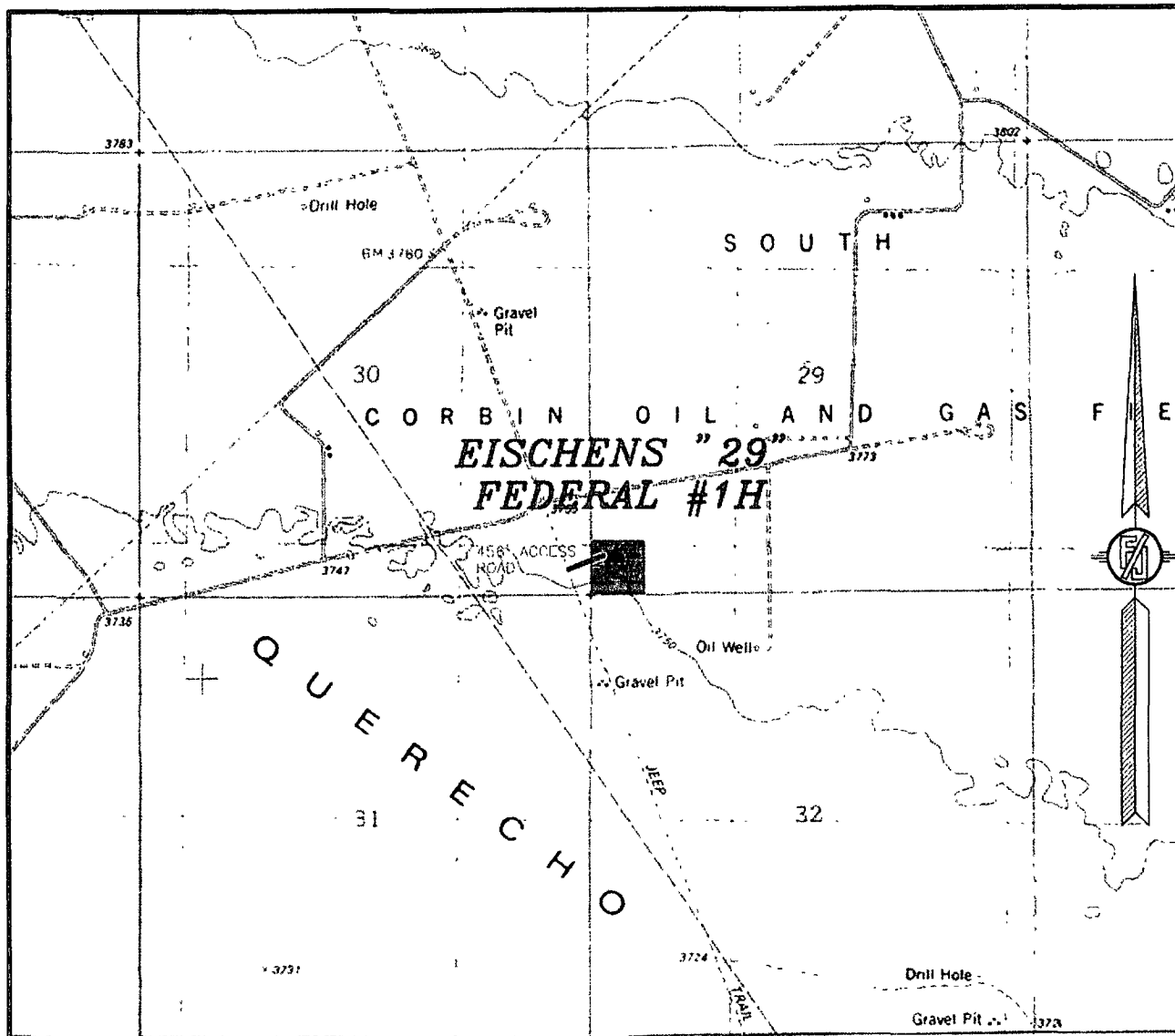
LOCATED 330 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 18 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

MAY 10, 2011

SURVEY NO. 462

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



CONTOUR INTERVAL:
LAGUNA GATUNA NW

NOT TO SCALE

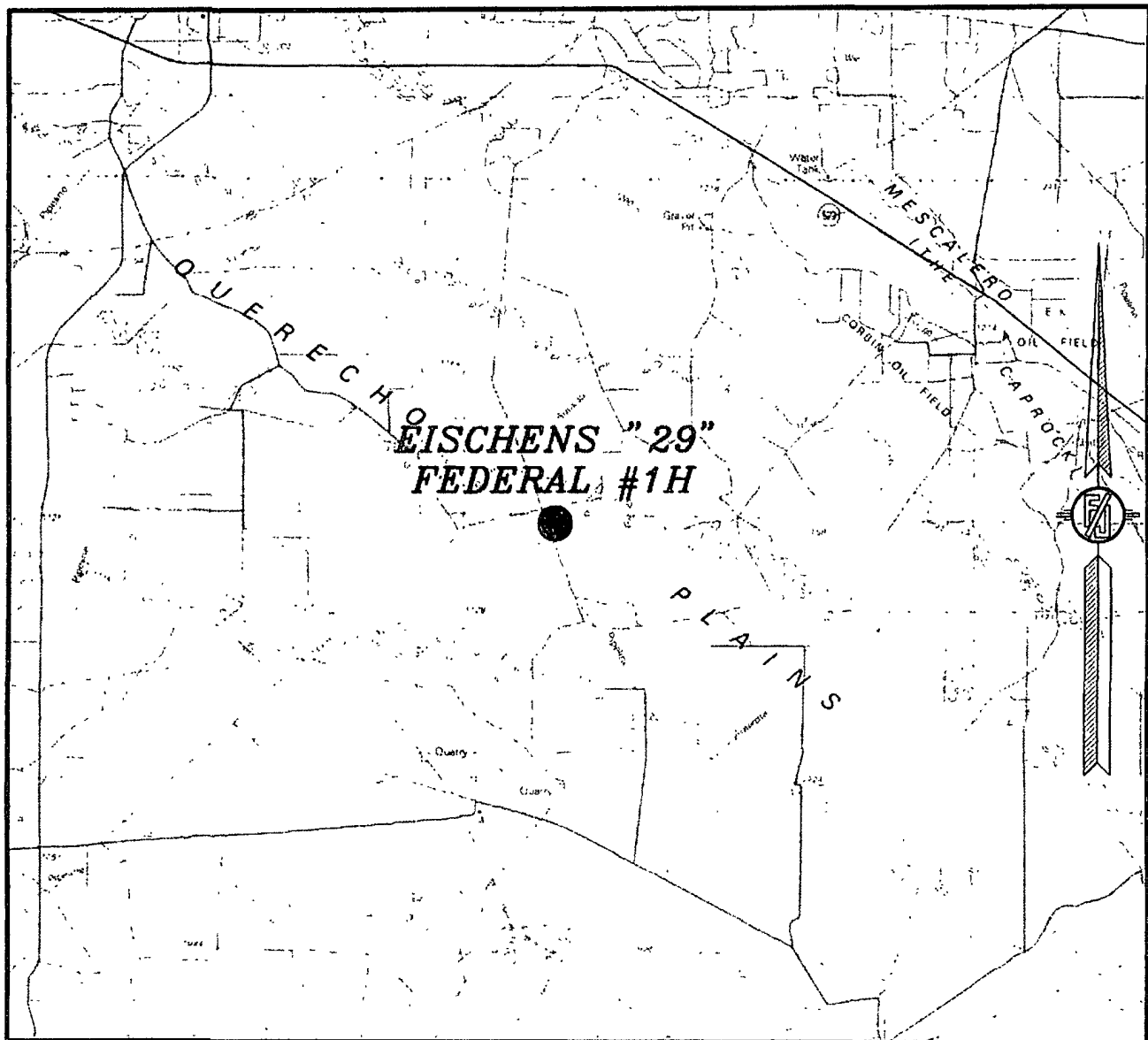
DEVON ENERGY PRODUCTION COMPANY, L.P.
EISCHEMS "29" FEDERAL #1H
LOCATED 330 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 18 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

MAY 10, 2011

SURVEY NO. 462

MADRON SURVEYING, INC. 301 SOUTH CANAL (475) 887-5850 CARLSBAD, NEW MEXICO

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

EISCHENS "29" FEDERAL #1H

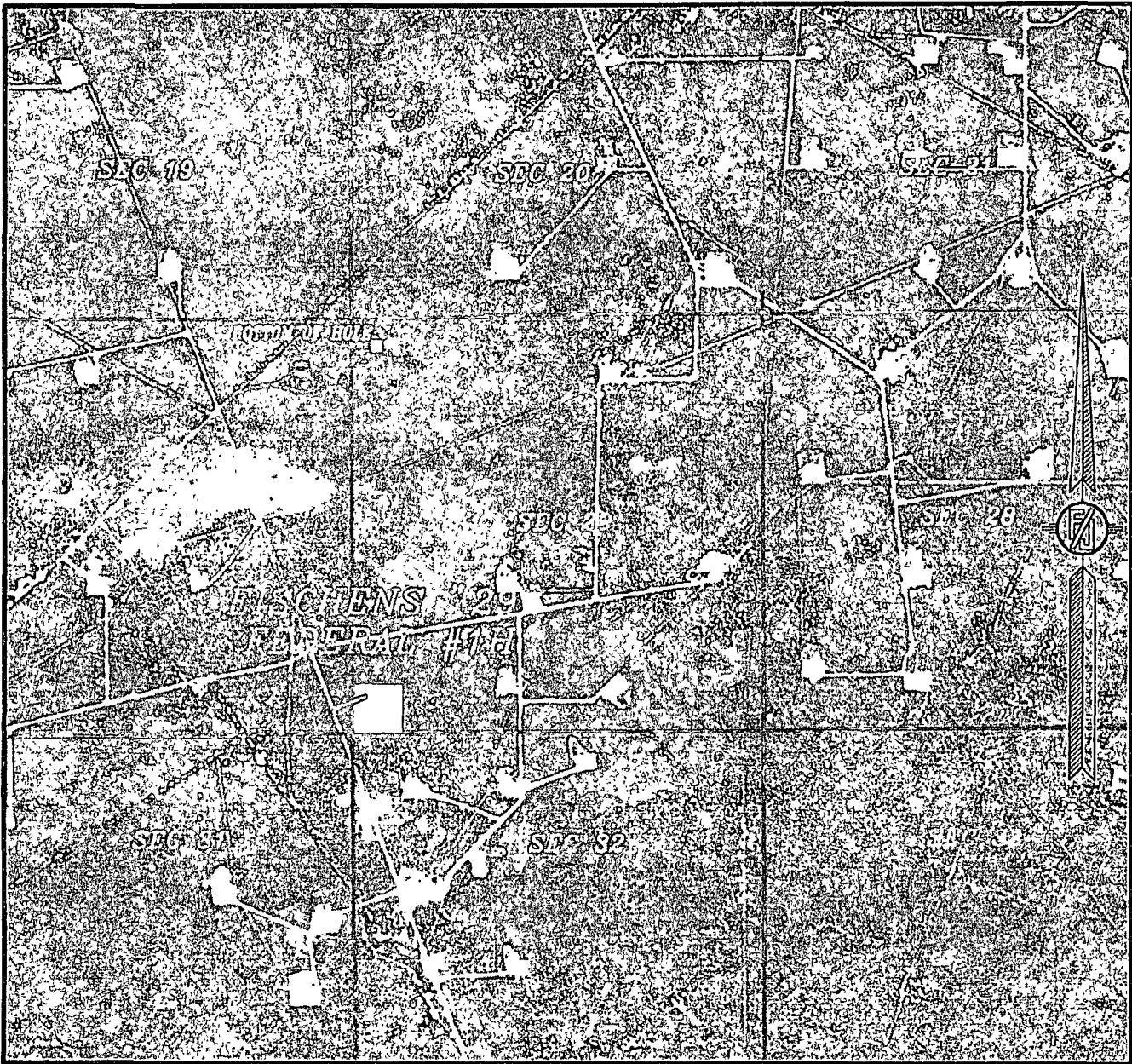
LOCATED 330 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 18 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

MAY 10, 2011

SURVEY NO. 462

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(505) 887-5830

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
USDA - AUG, 2009

DEVON ENERGY PRODUCTION COMPANY, L.P.

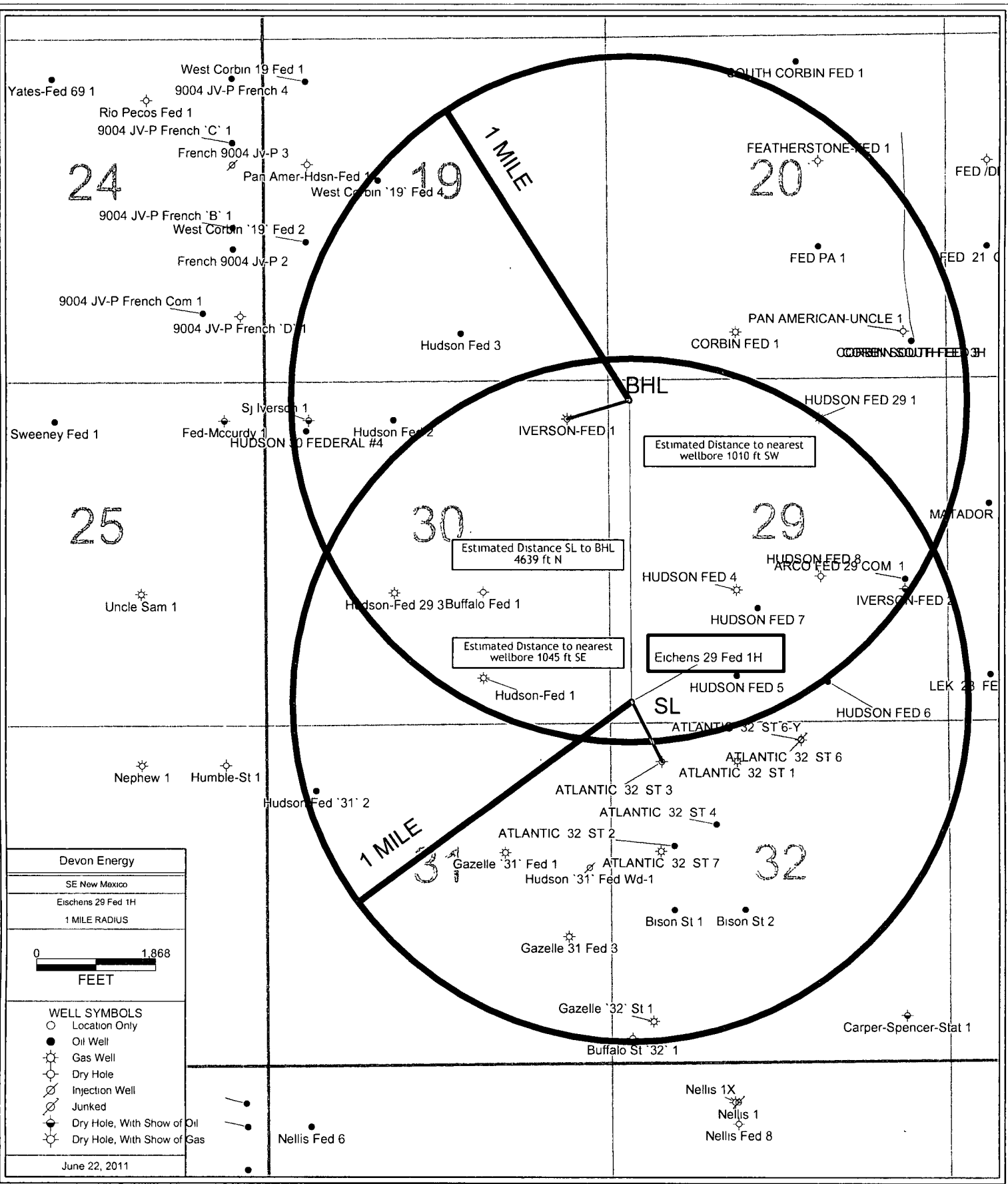
EISCHEMS "29" FEDERAL #1H

LOCATED 330 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 29, TOWNSHIP 18 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

MAY 10, 2011

SURVEY NO. 462

MADRON SURVEYING, INC. 391 SOUTH CAROLINA (575) 987-6830 CARLSBAD, NEW MEXICO



DRILLING PROGRAM

Devon Energy Production Company, LP

Eischens 29 Federal 1H

Surface Location: 330' FSL & 330' FWL, Unit M, Sec 29 T18S R33E, Lea, NM

Bottom hole Location: 330' FNL & 330' FWL, Unit D, Sec 29 T18S R33E, Lea, NM

1. Geologic Name of Surface Formation

a. Quaternary Alluvium

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geologic Formation	Depth (TVD)	O/G/W	Penetration Point
a. Fresh Water	300'	Water	330' FSL & 330' FWL
b. Rustler	1351'	Barren	330' FSL & 330' FWL
c. Salado	1598'	Barren	330' FSL & 330' FWL
d. Base Salt	2687'	Barren	330' FSL & 330' FWL
e. Tansill Dolomite	2799'	Oil	330' FSL & 330' FWL
f. Seven Rivers	3464'	Oil	330' FSL & 330' FWL
g. Queen SS	4140'	Oil	330' FSL & 330' FWL
h. Cherry Canyon	5145'	Oil	330' FSL & 330' FWL
i. Brushy Canyon	5923'	Oil	330' FSL & 330' FWL
j. 1 st Bone Spring LM	7300'	Oil	330' FSL & 330' FWL
k. 1 st Bone Spring SS	8697'	Oil	330' FSL & 330' FWL
l. Primary Target Ldg Zone	8725'	Oil	
m. Depth at TD (toe-up)	8555'	Oil	
n. 2 nd Bone Spring LM	8962'	Oil	330' FSL & 330' FWL
o. 2 nd Bone Spring SS	9295'	Oil	330' FSL & 330' FWL
p. Pilot Hole TD	9850'	Oil	330' FSL & 330' FWL

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 1420' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 5250' and circulating cement to surface. The pay intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

3. Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17-1/2"	0 – 1420	13-3/8"	0 – 1420	54.5#	5 4 TC	K-55
12-1/4"	1420– 5250	9-5/8"	0 – 5250	40#	BTC	HCK-55
8-3/4"	5250 – 9850 PH					
8-3/4"	5250 – 13,101	5-1/2"	0-8100 8100-13,101	17# 17#	LTC BTC	HCP-110 HCP-110

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13 3/8"	1.6	3.8	6.3
9 5/8	1.4	2.3	4.7
5 1/2"	1.3	1.7	2.3

4. Cement Program: (Cement volumes based on at least 25% excess)

Regarding the Pilot Hole: A Whipstock with ~1700' of 2 7/8" tubing tailpipe will be cemented in place at ~8100'. The plug back cement will be 650 sacks Class H with 1.18 cuft/sk yield.

Cementing Program

- 13 3/8" Surface** **Lead:** 850 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 5% bwow Sodium Chloride + 0.8% bwoc Sodium Metasilicate + 5% bwoc MPA-5 + 101.1% Fresh Water
Yield: 1.97 cf/sack. TOC @ surface.
- Tail:** 300 sacks Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water
Yield: 1.35 cf/sack.
- 9 5/8" Intermediate** **Lead:** 1400 sacks (50:50) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water
Yield: 2.24 cf/sack. TOC @ surface.
- Tail:** 300 sacks (60:40) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 64.7% Water
Yield: 1.38 cf/sack.
- 5 1/2 Production** **Lead:** 400 sacks (35:65) Poz + 0.2% bwoc Sodium Metasilicate + 1.4% bwoc FL-62 + 0.4% bwoc
Yield: 2.01 cf/sack.
- Tail**
Lead: 1315 sacks (50:50) Poz (Fly Ash):Premium Plus C Cement + 1% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.4% bwoc FL-52A + 0.4% bwoc R-3 + 103.1% Fresh Water
Yield: 1.28 cf/sack.
- DV TOOL at ~6500'**

2nd Stage

Lead: 210 sacks Class C+ 0.125 lbs/sack Cello Flake + 3
6% bwoc Bentonite + 0.4% bwoc FL-52A + 99.3% Fresh Water
Yield: 2.88 cf/sk

Tail: 100 sacks (60:40) Poz (Fly Ash):Class H Cement + 1% bwow Sodium Chloride
+ 0.15% bwoc + 63.2% Fresh Water
Yield: 1.35 cf/sk

TOC for All Strings:

Surface:	0'
Intermediate:	0'
Production	4700'

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.

5. Pressure Control Equipment:

The blow out prevention system will consist of a bag type (hydril) preventer, a double ram preventer stack, and a rotating head. Both the hydril and ram stack will be hydraulically operated. Both BOP systems will be rated at 5000psi. The hydril will be tested to 1000psi (high) and 250psi (low). The Hydril preventer on the 13 3/8" surface casing will be tested as a 2000 psi preventer. Prior to drilling out the 9 5/8" intermediate shoe, the ram stack will be nipped up with 4.5" pipe rams installed and will be used in the BOP. Tests on the 5000psi BOP will be conducted per the BLM Drilling Operations Order #2. For 12 1/4" hole only

The ram system will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and hydril, other BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5000 psi WP.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 1420'	8.4 - 9.0	32 - 34	N/C	FW/Gel
1420' - 5250'	10	28 - 30	N/C	Brine
5,250' - 13,101'	8.6 - 9.0	28	NC	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

8. Logging, Coring, and Testing Program: *See COA*

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- c. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area; therefore, no H₂S is anticipated to be encountered. If H₂S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4200 psi and Estimated BHT 140°.

10. Anticipated Starting Date and Duration of Operations:

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



Project Lea Co., New Mexico (Nad 83)
Site Eachens 28 Fed 1H
Wellbore Eachens 28 Fed 1H
Wellbore Lateral #1
Design: Design #1



DRILLING & MEASUREMENT
SERVICES

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSecl	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	8152.55	0.00	0.00	8152.55	0.00	0.00	0.00	0.00	0.00	0.00
3	8076.76	92.42	359.57	8725.00	567.14	-4.52	10.00	359.57	597.16	0.00
4	13101.99	92.42	359.57	8555.00	4618.67	-34.99	0.00	0.00	4618.80	PBHL - TD (E28F#1H)

ANNOTATIONS

TVD	MD	Annotation
8152.55	8152.55	KOP - Build 107'100'
8725.00	8076.76	EOC - Hold 1 92.42° @ A 359.57°

PROJECT DETAILS

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

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

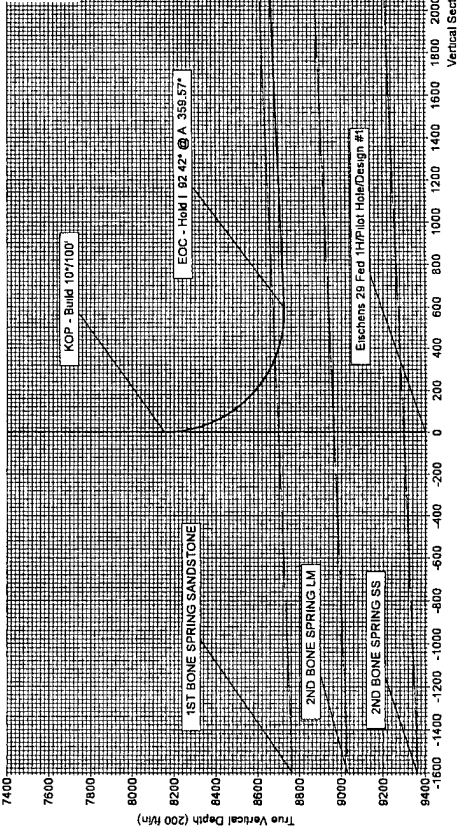
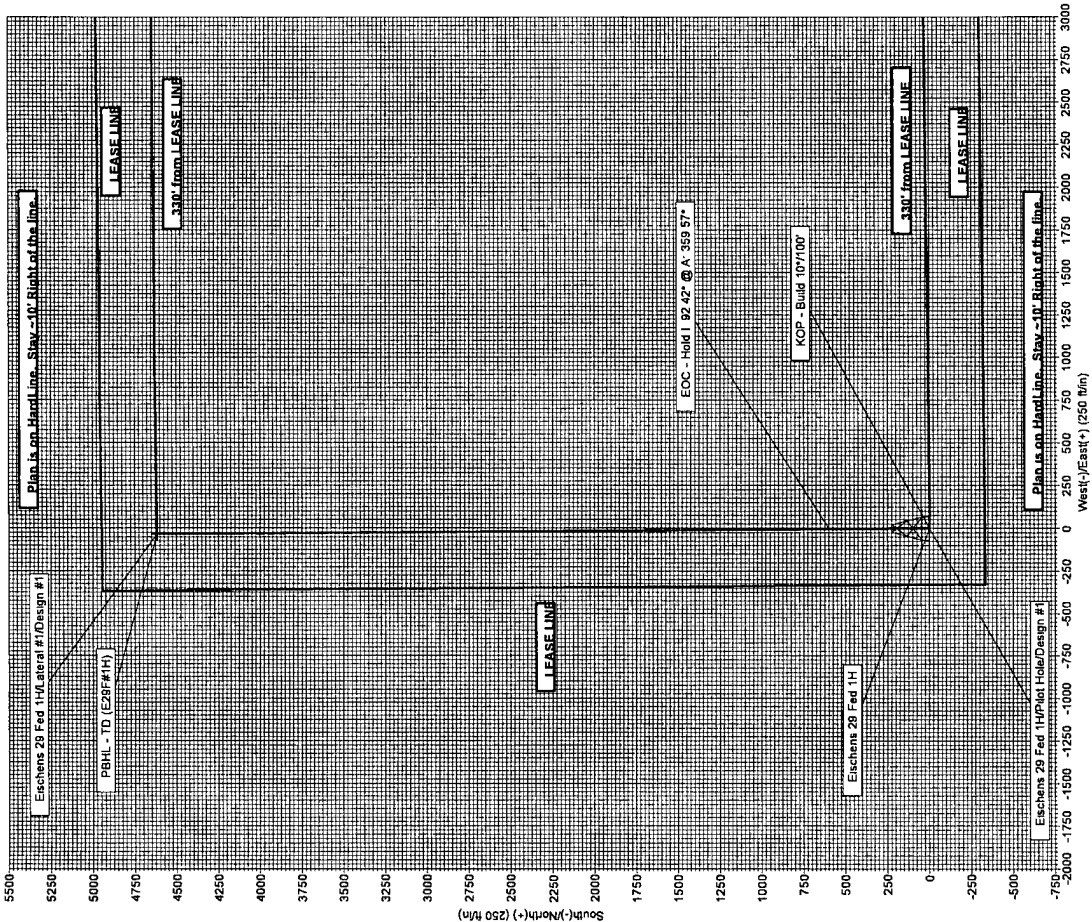
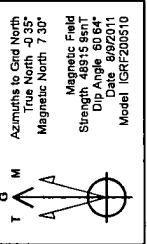
Name	PBHL - TD (E28F#1H)	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude	Shape
		8555.00	4618.67	-34.99	628001.54	738337.18	32° 43' 28.205 N	103° 41' 33.869 W	Point

WELL DETAILS

Ground Level	3740.00
Well	WELL @ 3765.00ft (Original Well Elev)
+N/S	0.00
+E/W	0.00
Northing	623382.88
Easting	738372.17
Latitude	32° 42' 43.503 N
Longitude	103° 41' 33.766 W
Slot	

Plan Design #1 (Eachens 28 Fed 1H/Lateral #1)

Created By	Mike Sturkey	Date	16.08. August 09 2011
Checked		Date	
Reviewed		Date	
Approved		Date	





Devon Energy Production Co, LP

Lea Co., New Mexico (Nad 83)

Eischens 29 Fed 1H

Eischens 29 Fed 1H

30-025-

Lateral #1

Plan: Design #1

Standard Planning Report

09 August, 2011



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Eischens 29 Fed 1H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3765.00ft (Original Well Elev)
Project:	Lea Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3765.00ft (Original Well Elev)
Site:	Eischens 29 Fed 1H	North Reference:	Grid
Well:	Eischens 29 Fed 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

Project	Lea 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	Eischens 29 Fed 1H, Sec 29, T-18S, R-33E				
Site Position:		Northing:	623,382.88 usft	Latitude:	32° 42' 43.503 N
From:	Map	Easting:	738,372.17 usft	Longitude:	103° 41' 33.786 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.35 °

Well	Eischens 29 Fed 1H					
Well Position	+N/-S	0.00 ft	Northing:	623,382.88 usft	Latitude:	32° 42' 43.503 N
	+E/-W	0.00 ft	Easting:	738,372.17 usft	Longitude:	103° 41' 33.786 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,765.00 ft	Ground Level:	3,740.00 ft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/9/2011	7.65	60.64	48,916

Design	Design #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	359.57	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,152.55	0.00	0.00	8,152.55	0.00	0.00	0.00	0.00	0.00	0.00	
9,076.76	92.42	359.57	8,725.00	597.14	-4.52	10.00	10.00	0.00	359.57	
13,101.99	92.42	359.57	8,555.00	4,618.67	-34.99	0.00	0.00	0.00	0.00	PBHL - TD (E29F#)



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Eischens 29 Fed 1H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3765.00ft (Original Well Elev)
Project:	Lea Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3765.00ft (Original Well Elev)
Site:	Eischens 29 Fed 1H	North Reference:	Grid
Well:	Eischens 29 Fed 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,152.55	0.00	0.00	8,152.55	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'									
8,200.00	4.74	359.57	8,199.95	1.96	-0.01	1.96	10.00	10.00	0.00
8,250.00	9.74	359.57	8,249.53	8.27	-0.06	8.27	10.00	10.00	0.00
8,300.00	14.74	359.57	8,298.38	18.87	-0.14	18.87	10.00	10.00	0.00
8,350.00	19.74	359.57	8,346.12	33.69	-0.26	33.69	10.00	10.00	0.00
8,400.00	24.74	359.57	8,392.38	52.61	-0.40	52.61	10.00	10.00	0.00
8,450.00	29.74	359.57	8,436.82	75.49	-0.57	75.49	10.00	10.00	0.00
8,500.00	34.74	359.57	8,479.09	102.16	-0.77	102.16	10.00	10.00	0.00
8,550.00	39.74	359.57	8,518.88	132.41	-1.00	132.41	10.00	10.00	0.00
8,600.00	44.74	359.57	8,555.89	166.01	-1.26	166.02	10.00	10.00	0.00
8,650.00	49.74	359.57	8,589.82	202.71	-1.54	202.72	10.00	10.00	0.00
8,700.00	54.74	359.57	8,620.42	242.23	-1.84	242.24	10.00	10.00	0.00
8,750.00	59.74	359.57	8,647.47	284.26	-2.15	284.27	10.00	10.00	0.00
8,800.00	64.74	359.57	8,670.74	328.50	-2.49	328.51	10.00	10.00	0.00
8,827.92	67.54	359.57	8,682.04	354.03	-2.68	354.04	10.00	10.00	0.00
1ST BONE SPRING SANDSTONE									
8,850.00	69.74	359.57	8,690.08	374.59	-2.84	374.60	10.00	10.00	0.00
8,900.00	74.74	359.57	8,705.32	422.19	-3.20	422.20	10.00	10.00	0.00
8,950.00	79.74	359.57	8,716.36	470.94	-3.57	470.95	10.00	10.00	0.00
9,000.00	84.74	359.57	8,723.10	520.47	-3.94	520.48	10.00	10.00	0.00
9,050.00	89.74	359.57	8,725.50	570.39	-4.32	570.41	10.00	10.00	0.00
9,076.76	92.42	359.57	8,725.00	597.14	-4.52	597.16	10.00	10.00	0.00
EOC - Hold 1: 92.42° @ A: 359.57°									
9,100.00	92.42	359.57	8,724.02	620.36	-4.70	620.38	0.00	0.00	0.00
9,200.00	92.42	359.57	8,719.79	720.27	-5.46	720.29	0.00	0.00	0.00
9,300.00	92.42	359.57	8,715.57	820.18	-6.21	820.20	0.00	0.00	0.00
9,400.00	92.42	359.57	8,711.35	920.08	-6.97	920.11	0.00	0.00	0.00
9,500.00	92.42	359.57	8,707.12	1,019.99	-7.73	1,020.02	0.00	0.00	0.00
9,600.00	92.42	359.57	8,702.90	1,119.90	-8.48	1,119.93	0.00	0.00	0.00
9,700.00	92.42	359.57	8,698.68	1,219.81	-9.24	1,219.84	0.00	0.00	0.00
9,800.00	92.42	359.57	8,694.45	1,319.72	-10.00	1,319.75	0.00	0.00	0.00
9,900.00	92.42	359.57	8,690.23	1,419.62	-10.75	1,419.66	0.00	0.00	0.00
10,000.00	92.42	359.57	8,686.01	1,519.53	-11.51	1,519.58	0.00	0.00	0.00
10,100.00	92.42	359.57	8,681.78	1,619.44	-12.27	1,619.49	0.00	0.00	0.00
10,200.00	92.42	359.57	8,677.56	1,719.35	-13.03	1,719.40	0.00	0.00	0.00
10,300.00	92.42	359.57	8,673.34	1,819.26	-13.78	1,819.31	0.00	0.00	0.00
10,400.00	92.42	359.57	8,669.11	1,919.16	-14.54	1,919.22	0.00	0.00	0.00
10,500.00	92.42	359.57	8,664.89	2,019.07	-15.30	2,019.13	0.00	0.00	0.00
10,600.00	92.42	359.57	8,660.67	2,118.98	-16.05	2,119.04	0.00	0.00	0.00
10,700.00	92.42	359.57	8,656.44	2,218.89	-16.81	2,218.95	0.00	0.00	0.00
10,800.00	92.42	359.57	8,652.22	2,318.80	-17.57	2,318.86	0.00	0.00	0.00
10,900.00	92.42	359.57	8,648.00	2,418.70	-18.32	2,418.77	0.00	0.00	0.00
11,000.00	92.42	359.57	8,643.77	2,518.61	-19.08	2,518.68	0.00	0.00	0.00
11,100.00	92.42	359.57	8,639.55	2,618.52	-19.84	2,618.59	0.00	0.00	0.00
11,200.00	92.42	359.57	8,635.33	2,718.43	-20.59	2,718.51	0.00	0.00	0.00
11,300.00	92.42	359.57	8,631.10	2,818.33	-21.35	2,818.42	0.00	0.00	0.00
11,400.00	92.42	359.57	8,626.88	2,918.24	-22.11	2,918.33	0.00	0.00	0.00
11,500.00	92.42	359.57	8,622.66	3,018.15	-22.86	3,018.24	0.00	0.00	0.00
11,600.00	92.42	359.57	8,618.43	3,118.06	-23.62	3,118.15	0.00	0.00	0.00
11,700.00	92.42	359.57	8,614.21	3,217.97	-24.38	3,218.06	0.00	0.00	0.00
11,800.00	92.42	359.57	8,609.99	3,317.87	-25.14	3,317.97	0.00	0.00	0.00
11,900.00	92.42	359.57	8,605.76	3,417.78	-25.89	3,417.88	0.00	0.00	0.00



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site Eischens 29 Fed 1H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3765.00ft (Original Well Elev)
Project:	Lea Co , New Mexico (Nad 83)	MD Reference:	WELL @ 3765.00ft (Original Well Elev)
Site:	Eischens 29 Fed 1H	North Reference:	Grid
Well:	Eischens 29 Fed 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

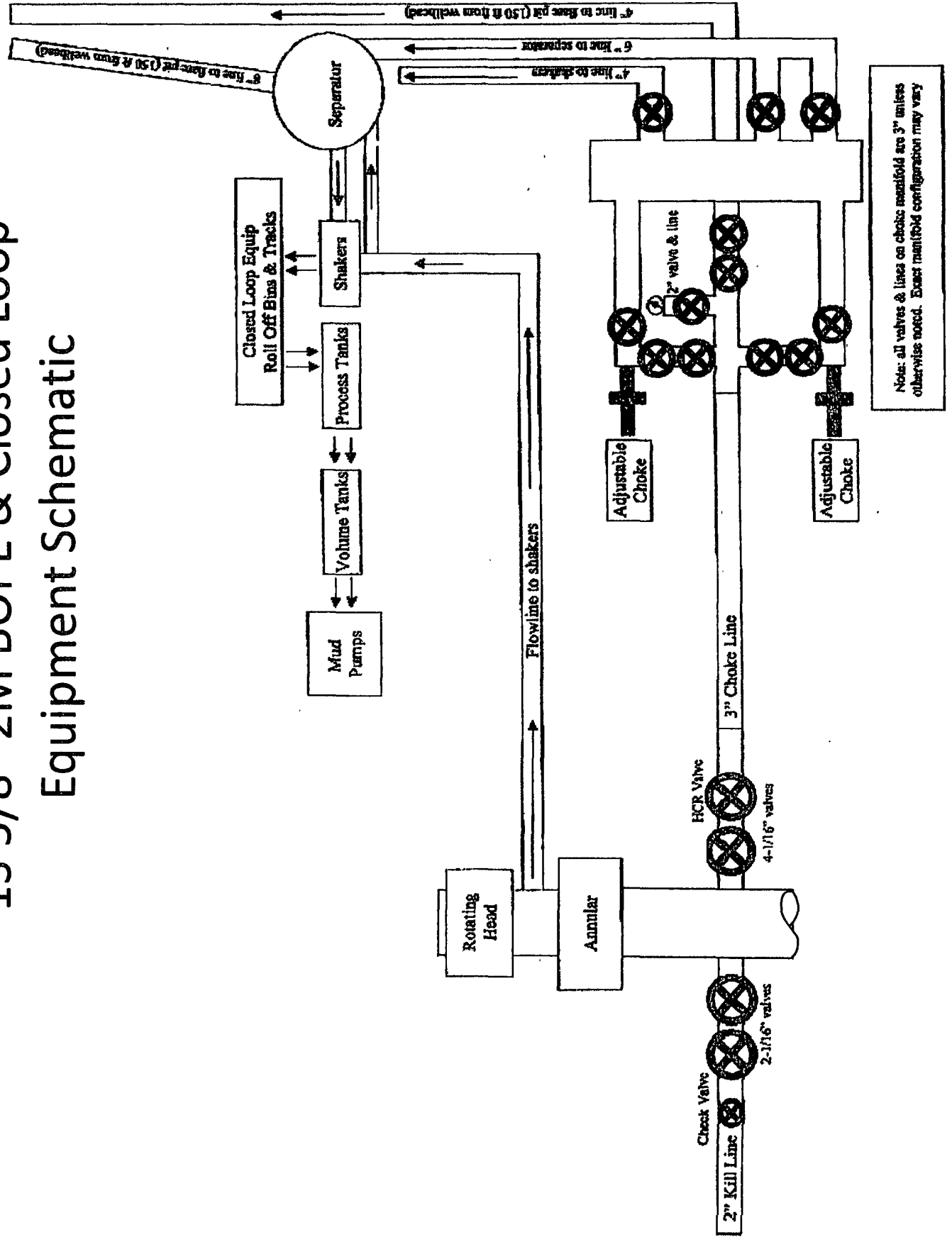
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,000.00	92.42	359.57	8,601.54	3,517.69	-26.65	3,517.79	0.00	0.00	0.00
12,100.00	92.42	359.57	8,597.32	3,617.60	-27.41	3,617.70	0.00	0.00	0.00
12,200.00	92.42	359.57	8,593.09	3,717.51	-28.16	3,717.61	0.00	0.00	0.00
12,300.00	92.42	359.57	8,588.87	3,817.41	-28.92	3,817.52	0.00	0.00	0.00
12,400.00	92.42	359.57	8,584.65	3,917.32	-29.68	3,917.43	0.00	0.00	0.00
12,500.00	92.42	359.57	8,580.42	4,017.23	-30.43	4,017.35	0.00	0.00	0.00
12,600.00	92.42	359.57	8,576.20	4,117.14	-31.19	4,117.26	0.00	0.00	0.00
12,700.00	92.42	359.57	8,571.98	4,217.05	-31.95	4,217.17	0.00	0.00	0.00
12,800.00	92.42	359.57	8,567.75	4,316.95	-32.70	4,317.08	0.00	0.00	0.00
12,900.00	92.42	359.57	8,563.53	4,416.86	-33.46	4,416.99	0.00	0.00	0.00
13,000.00	92.42	359.57	8,559.31	4,516.77	-34.22	4,516.90	0.00	0.00	0.00
13,101.99	92.42	359.57	8,555.00	4,618.67	-34.99	4,618.80	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL - TD (E29F#1H)	0.00	0.00	8,555.00	4,618.67	-34.99	628,001.54	738,337.18	32° 43' 29.205 N	103° 41' 33.869 W
- plan hits target center									
- Point									

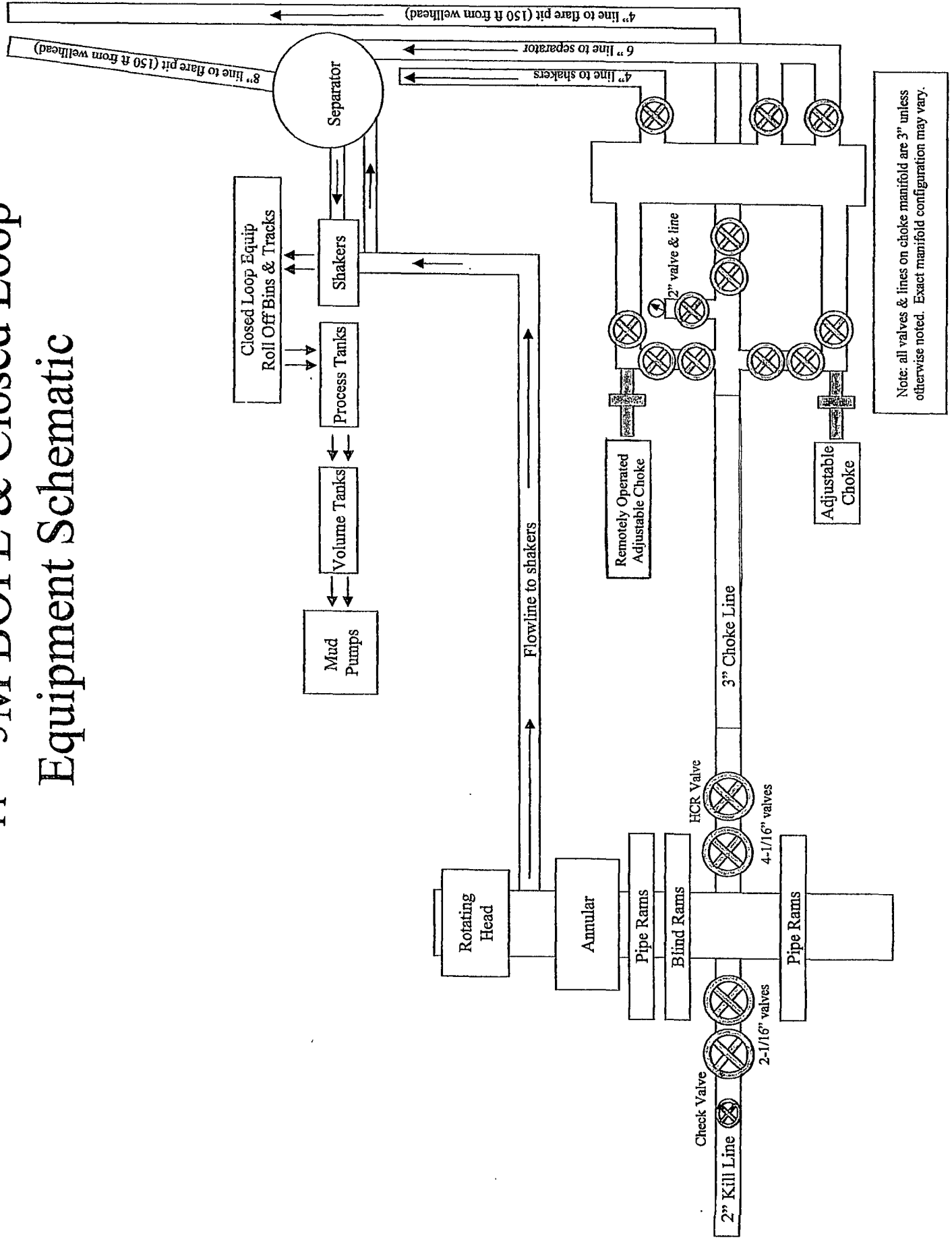
Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
25.00	25.00	QUATERNARY		-2.42	359.57	
1,351.00	1,351.00	RUSTLER DOL.		-2.42	359.57	
1,598.00	1,598.00	SALADO		-2.42	359.57	
2,687.00	2,687.00	BASE OF SALT		-2.42	359.57	
2,799.00	2,799.00	TANSILL DOLOMITE		-2.42	359.57	
3,464.00	3,464.00	SEVEN RIVERS		-2.42	359.57	
4,140.00	4,140.00	QUEEN SANDSTONE		-2.42	359.57	
5,145.00	5,145.00	CHERRY CANYON		-2.42	359.57	
5,923.00	5,923.00	BRUSHY CANYON		-2.42	359.57	
7,300.00	7,300.00	1ST BONE SPRING LM.		-2.42	359.57	
8,827.92	8,682.04	1ST BONE SPRING SANDSTONE		-2.42	359.57	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,152.55	8,152.55	0.00	0.00	KOP - Build 10°/100'
9,076.76	8,725.00	597.14	-4.52	EOC - Hold 1° 92.42° @ A° 359.57°

13 5/8" 2M BOPE & Closed Loop Equipment Schematic



11" 5M BOPE & Closed Loop Equipment Schematic



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Eischens 29 Federal 1H

Surface Location: 330' FSL & 330' FWL, Unit M, Sec 29 T18S R33E, Lea, NM
Bottom hole Location: 330' FNL & 330' FWL, Unit D, Sec 29 T18S R33E, Lea, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.