

DATE IN 12/14/11	SUSPENSE	ENGINEER D/LB	LOGGED IN 12/14/11	TYPE N/SL	APP NO. 1134832887
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



Devon 6137

Nega "24" Fed 214

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication
☒ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

- [D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
[B] ☒ Offset Operators, Leaseholders or Surface Owner
[C] ☐ Application is One Which Requires Published Legal Notice
[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

James Bruce
P.O. Box 1056
Santa Fe, New Mexico 87504

Signature

Title

Date

e-mail Address

RECEIVED OOD
2011 DEC 13 P 4:16

B-29-195-31E

6539

JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213
SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone)
(505) 660-6612 (Cell)
(505) 982-2151 (Fax)

jamesbruc@aol.com

December 13, 2011

David K. Brooks
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Brooks:

Pursuant to Division Rule NMAC 19.15.15.13, Devon Energy Production Company, L.P. applies for approval of an unorthodox oil well location for the following well:

<u>Well:</u>	Vega 29 Fed. Well No. 2H
<u>Surface location:</u>	137 feet FNL & 2310 feet FEL
<u>Penetration point:</u>	Same as surface location
<u>Bottom hole location:</u>	340 feet FSL & 1980 feet FEL
<u>Well unit (project area):</u>	W $\frac{1}{2}$ E $\frac{1}{2}$ of Section 29, Township 19 South, Range 31 East, N.M.P.M., Eddy County, New Mexico

Applicant proposes to drill the well to test the Bone Spring formation (Northwest Hackberry-Bone Spring Pool). The pool is spaced on 40 acres, with wells to be located no closer than 330 feet to a quarter-quarter section line. A Form C-102 is attached as **Exhibit A**. A drilling plan is attached as **Exhibit B**.

The surface location is unorthodox to avoid a pipeline to the south of the well's surface location. **Exhibit C**. Applicant does not want to move further south because that would minimize the length of the horizontal wellbore. **The producing interval will be no closer than 330 feet FNL of Section 29.**

The well encroaches on the S $\frac{1}{2}$ S $\frac{1}{2}$ of Section 20, which is operated by applicant for its proposed Rigel 20 Fed. Com. Well No. 4H (a Bone Spring test). **Exhibit D**. Notice was given to the offsets by the letter marked as **Exhibit E**.

Please contact me if you need any further information on this application.

Very truly yours,

A handwritten signature in cursive script, appearing to read "James Bruce". The signature is written in black ink and is positioned above the printed name.

James Bruce

Attorney for Devon Energy Production Company, L.P.

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

¹ API Number	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name VEGA "29" FEDERAL	⁶ Well Number 2H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3470.8

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	19 S	31 E		137	NORTH	2310	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
O	29	19 S	31 E		340	SOUTH	1980	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

NW CORNER SEC. 29 LAT. = 32.6386302°N LONG. = 103.8999686°W NMSP EAST (FT) N = 596336.65 E = 674736.47	SURFACE LOCATION VEGA "29" FEDERAL #2H ELEV. = 3470.8' LAT. = 32.6382673°N (NAD83) LONG. = 103.8903188°W NMSP EAST (FT) N = 596216.88 E = 677707.44	NE CORNER SEC. 29 LAT. = 32.6386573°N LONG. = 103.8828175°W NMSP EAST (FT) N = 596368.47 E = 680015.94
SW CORNER SEC. 29 LAT. = 32.6241144°N LONG. = 103.8999168°W NMSP EAST (FT) N = 591055.73 E = 674773.95	BOTTOM OF HOLE LAT. = 32.6250680°N LONG. = 103.8892002°W NMSP EAST (FT) N = 591416.29 E = 678071.86	SE CORNER SEC. 29 LAT. = 32.6241448°N LONG. = 103.8827673°W NMSP EAST (FT) N = 591088.77 E = 680053.80

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 _____ Date _____
Printed Name _____

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.

NOVEMBER 11, 2011
Date of Survey _____
Signature and Seal of Professional Surveyor _____
Certificate Number: **ELIMON F. JARAMILLO, PLS 12797**

EXHIBIT

A



Project: Eddy Co., New Mexico (Nad 83)
Site: Vega 28 Fed 2H
Well: Vega 28 Fed 2H
Wellbore: Lateral #1
Design: Design #2



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+NLS	+EAW	Dleg	TFace	VSeal	Target
1	8437.07	0.00	0.00	8437.07	0.00	0.00	0.00	0.00	0.00	0.00
2	8437.07	0.00	0.00	8437.07	0.00	0.00	0.00	0.00	0.00	0.00
3	8331.73	89.47	157.43	8010.00	-524.15	217.86	10.00	157.43	524.15	524.15
4	10083.87	89.47	180.00	9017.09	-1256.95	364.12	3.00	60.10	1256.95	1256.95
5	13527.68	89.47	180.00	9050.00	-4800.80	364.42	0.00	0.00	4800.80	PBHL - TD (V28F2H)

ANNOTATIONS

TVD MD Annotation
8437.07 KOP Build 10° / 100°
9010.00 9331.73 EOC: Hold 1° 89.47° turn to A: 180°

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

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

Name PBHL - TD (V28F2H)
TVD 9050.00
+NLS 4800.80
+EAW 364.42
Northing 591418.29
Easting 678071.88
Latitude 32° 37' 30.245 N
Longitude 103° 53' 21.721 W
Shape Point

WELL DETAILS: Vega 28 Fed 2H

Ground Level:
WELL @ 3491.00ft (Original Well Elev)
+NLS 0.00
+EAW 0.00
Northing 598216.88
Easting 677707.44
Latitude 32° 38' 17.782 N
Longitude 103° 53' 25.148 W
Slot

Plan: Design #2 (Vega 28 Fed 2H Lateral #1)

Created By: Eric Minchew
Checked: _____
Reviewed: _____
Approved: _____
Date: 11/30, November 17, 2011
Date: _____
Date: _____
Date: _____

T M
G A
Magnetic Field
Strength: 48782.1nT
Dip Angle: 60.51°
Date: 11/22/2011
Model: GPR2010

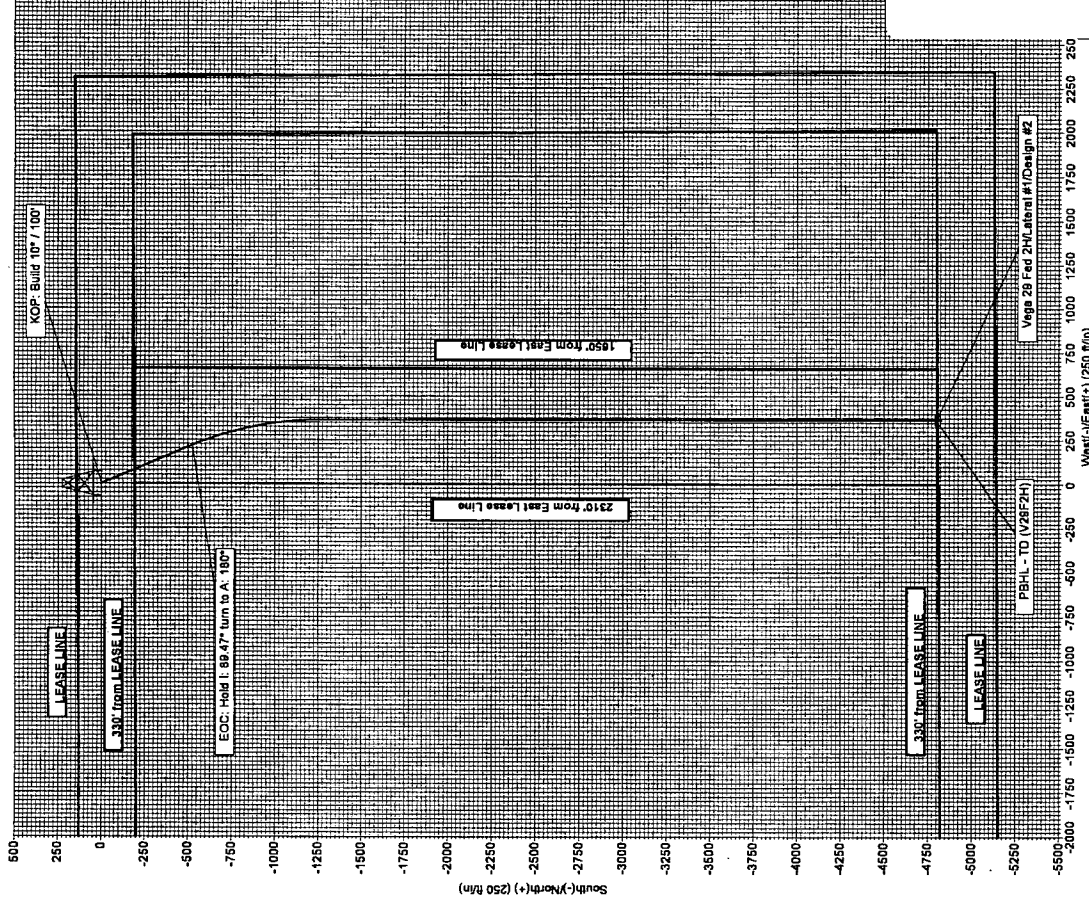
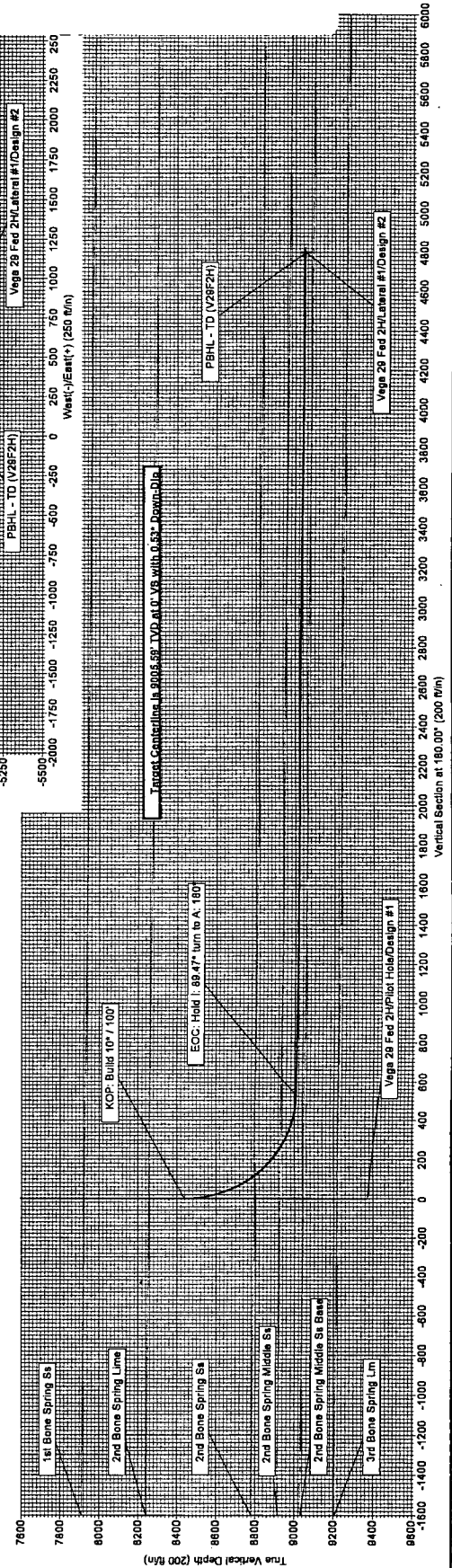


EXHIBIT B





Devon Energy Production Co, LP

Eddy Co., New Mexico (Nad 83)

Vega 29 Fed 2H

Vega 29 Fed 2H

30-015-XXXXX

Lateral #1

Plan: Design #2

Standard Planning Report

17 November, 2011



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Vega 29 Fed 2H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3491.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3491.00ft (Original Well Elev)
Site:	Vega 29 Fed 2H	North Reference:	Grid
Well:	Vega 29 Fed 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #2		

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:	Vega 29 Fed 2H, Sec 29, T-19S, R-31E		
Site Position:		Northing:	596,216.88 usft
From:	Map	Easting:	677,707.44 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	32° 38' 17.762 N
		Longitude:	103° 53' 25.148 W
		Grid Convergence:	0.24 °

Well:	Vega 29 Fed 2H					
Well Position	+N/-S	0.00 ft	Northing:	596,216.88 usft	Latitude:	32° 38' 17.762 N
	+E/-W	0.00 ft	Easting:	677,707.44 usft	Longitude:	103° 53' 25.148 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,491.00 ft	Ground Level:	3,471.00 ft

Wellbore		Lateral #1			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/2/2011	7.72	60.51	48.792

Design		Design #2		
Audit Notes:				
Version:		Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	180.00

Plan Sections:										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,437.07	0.00	0.00	8,437.07	0.00	0.00	0.00	0.00	0.00	0.00	
9,331.73	89.47	157.43	9,010.00	-524.15	217.86	10.00	10.00	0.00	157.43	
10,083.87	89.47	180.00	9,017.09	-1,256.95	364.12	3.00	0.00	3.00	90.10	
13,627.68	89.47	180.00	9,050.00	-4,800.60	364.42	0.00	0.00	0.00	0.00	PBHL - TD (V29F2)



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Vega 29 Fed 2H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3491.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3491.00ft (Original Well Elev)
Site:	Vega 29 Fed 2H	North Reference:	Grid
Well:	Vega 29 Fed 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #2		

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)	
8,437.07	0.00	0.00	8,437.07	0.00	0.00	0.00	0.00	0.00	0.00	
KOP: Build 10° / 100'										
8,450.00	1.29	157.43	8,450.00	-0.13	0.06	0.13	10.00	10.00	0.00	
8,500.00	6.29	157.43	8,499.87	-3.19	1.33	3.19	10.00	10.00	0.00	
8,550.00	11.29	157.43	8,549.27	-10.24	4.26	10.24	10.00	10.00	0.00	
8,600.00	16.29	157.43	8,597.81	-21.25	8.83	21.25	10.00	10.00	0.00	
8,650.00	21.29	157.43	8,645.13	-36.12	15.01	36.12	10.00	10.00	0.00	
8,700.00	26.29	157.43	8,690.87	-54.74	22.75	54.74	10.00	10.00	0.00	
8,750.00	31.29	157.43	8,734.67	-76.97	31.99	76.97	10.00	10.00	0.00	
8,800.00	36.29	157.43	8,776.21	-102.64	42.66	102.64	10.00	10.00	0.00	
8,825.06	38.80	157.43	8,796.08	-116.74	48.52	116.74	10.00	10.00	0.00	
2nd Bone Spring Ss										
8,850.00	41.29	157.43	8,815.17	-131.56	54.68	131.56	10.00	10.00	0.00	
8,900.00	46.29	157.43	8,851.25	-163.50	67.96	163.50	10.00	10.00	0.00	
8,950.00	51.29	157.43	8,884.18	-198.22	82.39	198.22	10.00	10.00	0.00	
9,000.00	56.29	157.43	8,913.71	-235.47	97.87	235.47	10.00	10.00	0.00	
9,035.41	59.83	157.43	8,932.44	-263.21	109.40	263.21	10.00	10.00	0.00	
2nd Bone Spring Middle Ss										
9,050.00	61.29	157.43	8,939.60	-274.94	114.28	274.94	10.00	10.00	0.00	
9,100.00	66.29	157.43	8,961.68	-316.36	131.49	316.36	10.00	10.00	0.00	
9,150.00	71.29	157.43	8,979.76	-359.39	149.38	359.39	10.00	10.00	0.00	
9,200.00	76.29	157.43	8,993.71	-403.71	167.80	403.71	10.00	10.00	0.00	
9,250.00	81.29	157.43	9,003.43	-448.98	186.62	448.98	10.00	10.00	0.00	
9,300.00	86.29	157.43	9,008.83	-494.87	205.69	494.87	10.00	10.00	0.00	
9,331.73	89.47	157.43	9,010.00	-524.14	217.86	524.14	10.00	10.00	0.00	
EOC: Hold 1: 89.47° turn to A: 180°										
9,400.00	89.46	159.48	9,010.64	-587.64	242.93	587.64	3.00	0.00	3.00	
9,500.00	89.46	162.48	9,011.58	-682.16	275.52	682.16	3.00	0.00	3.00	
9,600.00	89.46	165.48	9,012.53	-778.26	303.11	778.26	3.00	0.00	3.00	
9,700.00	89.46	168.48	9,013.48	-875.68	325.64	875.68	3.00	0.00	3.00	
9,800.00	89.46	171.48	9,014.43	-974.13	343.04	974.13	3.00	0.00	3.00	
9,900.00	89.46	174.48	9,015.37	-1,073.37	355.26	1,073.37	3.00	0.00	3.00	
10,000.00	89.46	177.48	9,016.31	-1,173.11	362.27	1,173.11	3.00	0.00	3.00	
10,083.87	89.47	180.00	9,017.09	-1,256.95	364.12	1,256.95	3.00	0.01	3.00	
10,100.00	89.47	180.00	9,017.24	-1,273.07	364.12	1,273.07	0.00	0.00	0.00	
10,200.00	89.47	180.00	9,018.17	-1,373.07	364.13	1,373.07	0.00	0.00	0.00	
10,300.00	89.47	180.00	9,019.10	-1,473.07	364.14	1,473.07	0.00	0.00	0.00	
10,400.00	89.47	180.00	9,020.03	-1,573.06	364.15	1,573.06	0.00	0.00	0.00	
10,500.00	89.47	180.00	9,020.96	-1,673.06	364.16	1,673.06	0.00	0.00	0.00	
10,600.00	89.47	180.00	9,021.89	-1,773.05	364.16	1,773.05	0.00	0.00	0.00	
10,700.00	89.47	180.00	9,022.81	-1,873.05	364.17	1,873.05	0.00	0.00	0.00	
10,800.00	89.47	180.00	9,023.74	-1,973.04	364.18	1,973.04	0.00	0.00	0.00	
10,900.00	89.47	180.00	9,024.67	-2,073.04	364.19	2,073.04	0.00	0.00	0.00	
11,000.00	89.47	180.00	9,025.60	-2,173.04	364.20	2,173.04	0.00	0.00	0.00	
11,100.00	89.47	180.00	9,026.53	-2,273.03	364.21	2,273.03	0.00	0.00	0.00	
11,200.00	89.47	180.00	9,027.46	-2,373.03	364.21	2,373.03	0.00	0.00	0.00	
11,300.00	89.47	180.00	9,028.39	-2,473.02	364.22	2,473.02	0.00	0.00	0.00	
11,400.00	89.47	180.00	9,029.31	-2,573.02	364.23	2,573.02	0.00	0.00	0.00	
11,500.00	89.47	180.00	9,030.24	-2,673.01	364.24	2,673.01	0.00	0.00	0.00	
11,600.00	89.47	180.00	9,031.17	-2,773.01	364.25	2,773.01	0.00	0.00	0.00	
11,700.00	89.47	180.00	9,032.10	-2,873.01	364.26	2,873.01	0.00	0.00	0.00	
11,800.00	89.47	180.00	9,033.03	-2,973.00	364.27	2,973.00	0.00	0.00	0.00	
11,900.00	89.47	180.00	9,033.96	-3,073.00	364.27	3,073.00	0.00	0.00	0.00	



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Vega 29 Fed 2H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3491.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3491.00ft (Original Well Elev)
Site:	Vega 29 Fed 2H	North Reference:	Grid
Well:	Vega 29 Fed 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #2		

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	89.47	180.00	9,034.89	-3,172.99	364.28	3,172.99	0.00	0.00	0.00
12,100.00	89.47	180.00	9,035.81	-3,272.99	364.29	3,272.99	0.00	0.00	0.00
12,200.00	89.47	180.00	9,036.74	-3,372.98	364.30	3,372.98	0.00	0.00	0.00
12,300.00	89.47	180.00	9,037.67	-3,472.98	364.31	3,472.98	0.00	0.00	0.00
12,400.00	89.47	180.00	9,038.60	-3,572.98	364.32	3,572.98	0.00	0.00	0.00
12,500.00	89.47	180.00	9,039.53	-3,672.97	364.33	3,672.97	0.00	0.00	0.00
12,600.00	89.47	180.00	9,040.46	-3,772.97	364.33	3,772.97	0.00	0.00	0.00
12,700.00	89.47	180.00	9,041.39	-3,872.96	364.34	3,872.96	0.00	0.00	0.00
12,800.00	89.47	180.00	9,042.31	-3,972.96	364.35	3,972.96	0.00	0.00	0.00
12,900.00	89.47	180.00	9,043.24	-4,072.95	364.36	4,072.95	0.00	0.00	0.00
13,000.00	89.47	180.00	9,044.17	-4,172.95	364.37	4,172.95	0.00	0.00	0.00
13,100.00	89.47	180.00	9,045.10	-4,272.95	364.38	4,272.95	0.00	0.00	0.00
13,200.00	89.47	180.00	9,046.03	-4,372.94	364.38	4,372.94	0.00	0.00	0.00
13,300.00	89.47	180.00	9,046.96	-4,472.94	364.39	4,472.94	0.00	0.00	0.00
13,400.00	89.47	180.00	9,047.89	-4,572.93	364.40	4,572.93	0.00	0.00	0.00
13,500.00	89.47	180.00	9,048.81	-4,672.93	364.41	4,672.93	0.00	0.00	0.00
13,600.00	89.47	180.00	9,049.74	-4,772.92	364.42	4,772.92	0.00	0.00	0.00
13,627.68	89.47	180.00	9,050.00	-4,800.60	364.42	4,800.60	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	0.00	0.00	9,050.00	-4,800.60	364.42	591,416.29	678,071.86	32° 37' 30.245 N	103° 53' 21.121 W
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
395.00	395.00	Rustler		0.53	180.00	
535.00	535.00	Salado		0.53	180.00	
2,025.00	2,025.00	Tansil Dolomite		0.53	180.00	
2,125.00	2,125.00	Yates		0.53	180.00	
2,380.00	2,380.00	Seven Rivers		0.53	180.00	
2,490.00	2,490.00	Capitan		0.53	180.00	
3,995.00	3,995.00	B/Capitan		0.53	180.00	
4,370.00	4,370.00	Delaware		0.53	180.00	
6,655.00	6,655.00	Bone Spring		0.53	180.00	
7,925.00	7,925.00	1st Bone Spring Ss		0.53	180.00	
8,255.00	8,255.00	2nd Bone Spring Lime		0.53	180.00	
8,825.06	8,796.08	2nd Bone Spring Ss		0.53	180.00	
9,035.41	8,932.44	2nd Bone Spring Middle Ss		0.53	180.00	



CUDD Drilling and Measurement Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Site Vega 29 Fed 2H
Company:	Devon Energy Production Co, LP	TVD Reference:	WELL @ 3491.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3491.00ft (Original Well Elev)
Site:	Vega 29 Fed 2H	North Reference:	Grid
Well:	Vega 29 Fed 2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #2		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,437.07	8,437.07	0.00	0.00	KOP: Build 10° / 100'
9,331.73	9,010.00	-524.14	217.86	EOC: Hold I: 89.47° turn to A: 180°

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Devon Energy Production Co, LP
Vega 29 Fed 2H - Design #2

Eddy Co., New Mexico (Nad 83)
Vega 29 Fed 2H

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00
0.00						
8437.07	0.000	0.000	8437.07	0.00 N	0.00 E	0.00
0.00						
8450.00	1.293	157.430	8450.00	0.13 S	0.06 E	0.13
10.00						
8500.00	6.293	157.430	8499.87	3.19 S	1.33 E	3.19
10.00						
8550.00	11.293	157.430	8549.27	10.24 S	4.26 E	10.24
10.00						
8600.00	16.293	157.430	8597.81	21.25 S	8.83 E	21.25
10.00						
8650.00	21.293	157.430	8645.13	36.12 S	15.01 E	36.12
10.00						
8700.00	26.293	157.430	8690.87	54.74 S	22.75 E	54.74
10.00						
8750.00	31.293	157.430	8734.67	76.97 S	31.99 E	76.97
10.00						
8800.00	36.293	157.430	8776.21	102.64 S	42.66 E	102.64
10.00						
8850.00	41.293	157.430	8815.17	131.56 S	54.68 E	131.56
10.00						
8900.00	46.293	157.430	8851.25	163.50 S	67.96 E	163.50
10.00						
8950.00	51.293	157.430	8884.18	198.22 S	82.39 E	198.22
10.00						
9000.00	56.293	157.430	8913.71	235.47 S	97.87 E	235.47
10.00						
9050.00	61.293	157.430	8939.60	274.94 S	114.28 E	274.94
10.00						
9100.00	66.293	157.430	8961.68	316.36 S	131.49 E	316.36
10.00						
9150.00	71.293	157.430	8979.76	359.39 S	149.38 E	359.39
10.00						
9200.00	76.293	157.430	8993.71	403.71 S	167.80 E	403.71
10.00						
9250.00	81.293	157.430	9003.43	448.98 S	186.62 E	448.98
10.00						
9300.00	86.293	157.430	9008.83	494.87 S	205.69 E	494.87
10.00						
9331.73	89.466	157.430	9010.00	524.15 S	217.86 E	524.15
10.00						
9400.00	89.463	159.478	9010.64	587.64 S	242.93 E	587.64
3.00						
9500.00	89.459	162.478	9011.58	682.16 S	275.52 E	682.16
3.00						
9600.00	89.457	165.478	9012.53	778.26 S	303.11 E	778.26
3.00						
9700.00	89.456	168.479	9013.48	875.68 S	325.64 E	875.68
3.00						

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9800.00	89.457	171.479	9014.43	974.13 S	343.04 E	974.13
3.00						
9900.00	89.460	174.479	9015.37	1073.37 S	355.26 E	1073.37
3.00						
10000.00	89.464	177.479	9016.31	1173.11 S	362.27 E	1173.11
3.00						
10083.87	89.468	179.995	9017.09	1256.95 S	364.12 E	1256.95
3.00						
10100.00	89.468	179.995	9017.24	1273.07 S	364.12 E	1273.07
0.00						
10200.00	89.468	179.995	9018.17	1373.07 S	364.13 E	1373.07
0.00						
10300.00	89.468	179.995	9019.10	1473.07 S	364.14 E	1473.07
0.00						
10400.00	89.468	179.995	9020.03	1573.06 S	364.15 E	1573.06
0.00						
10500.00	89.468	179.995	9020.96	1673.06 S	364.16 E	1673.06
0.00						
10600.00	89.468	179.995	9021.89	1773.05 S	364.16 E	1773.05
0.00						
10700.00	89.468	179.995	9022.81	1873.05 S	364.17 E	1873.05
0.00						
10800.00	89.468	179.995	9023.74	1973.04 S	364.18 E	1973.04
0.00						
10900.00	89.468	179.995	9024.67	2073.04 S	364.19 E	2073.04
0.00						
11000.00	89.468	179.995	9025.60	2173.04 S	364.20 E	2173.04
0.00						
11100.00	89.468	179.995	9026.53	2273.03 S	364.21 E	2273.03
0.00						
11200.00	89.468	179.995	9027.46	2373.03 S	364.21 E	2373.03
0.00						
11300.00	89.468	179.995	9028.39	2473.02 S	364.22 E	2473.02
0.00						
11400.00	89.468	179.995	9029.31	2573.02 S	364.23 E	2573.02
0.00						
11500.00	89.468	179.995	9030.24	2673.01 S	364.24 E	2673.01
0.00						
11600.00	89.468	179.995	9031.17	2773.01 S	364.25 E	2773.01
0.00						
11700.00	89.468	179.995	9032.10	2873.01 S	364.26 E	2873.01
0.00						
11800.00	89.468	179.995	9033.03	2973.00 S	364.27 E	2973.00
0.00						
11900.00	89.468	179.995	9033.96	3073.00 S	364.27 E	3073.00
0.00						
12000.00	89.468	179.995	9034.89	3172.99 S	364.28 E	3172.99
0.00						
12100.00	89.468	179.995	9035.81	3272.99 S	364.29 E	3272.99
0.00						
12200.00	89.468	179.995	9036.74	3372.98 S	364.30 E	3372.98
0.00						
12300.00	89.468	179.995	9037.67	3472.98 S	364.31 E	3472.98
0.00						
12400.00	89.468	179.995	9038.60	3572.98 S	364.32 E	3572.98
0.00						
12500.00	89.468	179.995	9039.53	3672.97 S	364.33 E	3672.97
0.00						
12600.00	89.468	179.995	9040.46	3772.97 S	364.33 E	3772.97
0.00						
12700.00	89.468	179.995	9041.39	3872.96 S	364.34 E	3872.96
0.00						
12800.00	89.468	179.995	9042.31	3972.96 S	364.35 E	3972.96

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0.00	12900.00	89.468	179.995	9043.24	4072.95 S	364.36 E	4072.95
0.00	13000.00	89.468	179.995	9044.17	4172.95 S	364.37 E	4172.95
0.00	13100.00	89.468	179.995	9045.10	4272.95 S	364.38 E	4272.95
0.00	13200.00	89.468	179.995	9046.03	4372.94 S	364.38 E	4372.94
0.00	13300.00	89.468	179.995	9046.96	4472.94 S	364.39 E	4472.94
0.00	13400.00	89.468	179.995	9047.89	4572.93 S	364.40 E	4572.93
0.00	13500.00	89.468	179.995	9048.81	4672.93 S	364.41 E	4672.93
0.00	13600.00	89.468	179.995	9049.74	4772.92 S	364.42 E	4772.92
0.00	13627.68	89.468	179.995	9050.00	4800.60 S	364.42 E	4800.60
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 Site.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 180.000° (Grid).

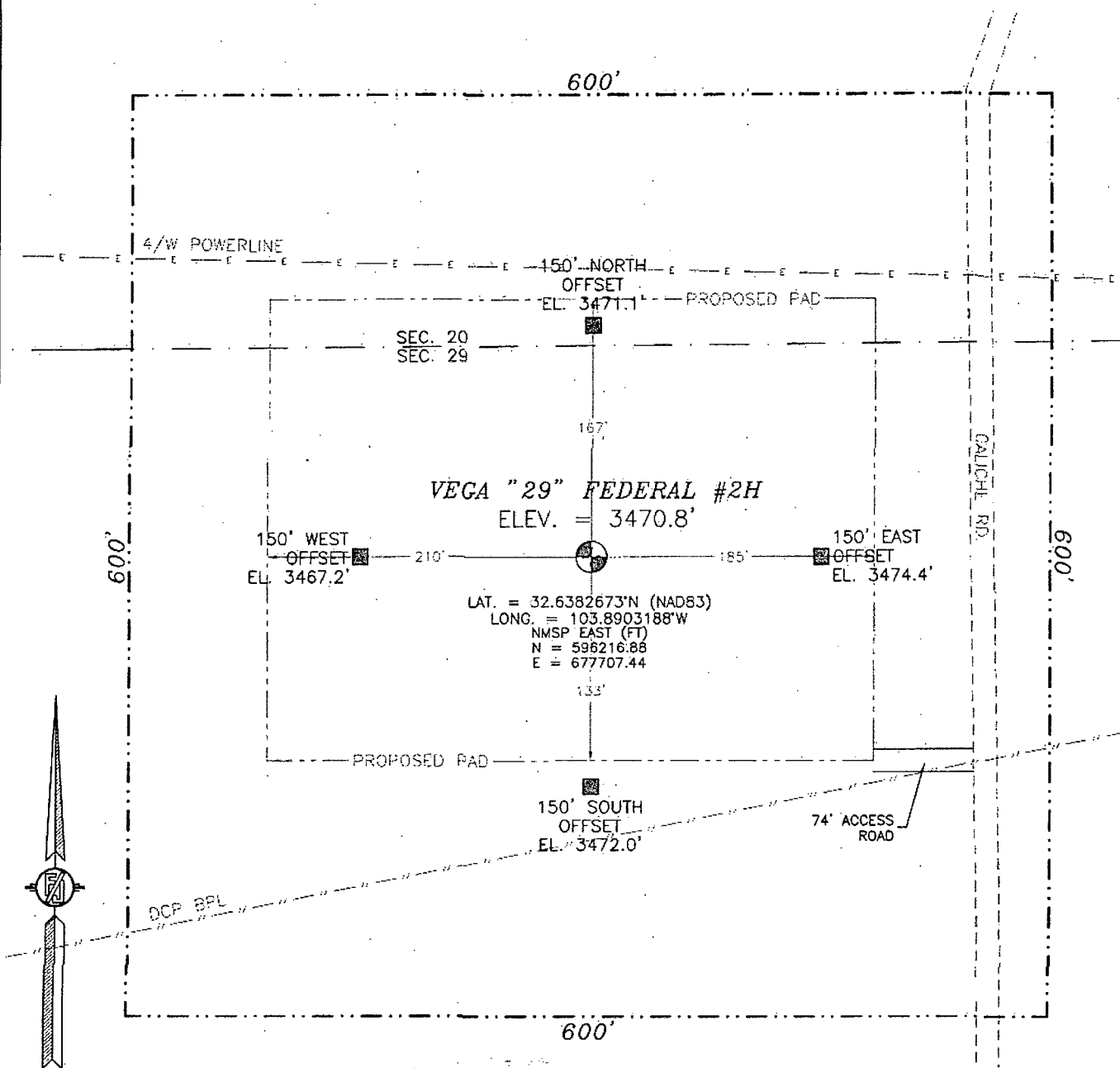
Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.239°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 13627.68ft., the Bottom Hole Displacement is 4814.41ft., in the Direction of 180.000° (Grid).

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM PAVED CR. #222 (SHUGART) AND PAVED CR. #248 (LUSK PLANT). GO SOUTHWEST ON 222 3.65 MILES, TURN RIGHT ON CALICHE ROAD AND GO NORTH-NORTHEAST 0.8 MILES, TURN LEFT AND GO WEST THEN NORTH A TOTAL OF 0.25 MILES AND LOCATION IS ON THE LEFT (WEST) 260'

DEVON ENERGY PRODUCTION COMPANY, L.P.

VEGA "29" FEDERAL #2H

LOCATED 137 FT. FROM THE NORTH LINE
AND 2310 FT. FROM THE EAST LINE OF
SECTION 29, TOWNSHIP 19 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

NOVEMBER 11, 2011

SURVEY NO. 705

MADRON SURVEYING, INC. 501 SOUTH CANAL (575) 234-3367 CAR

EXHIBIT

C

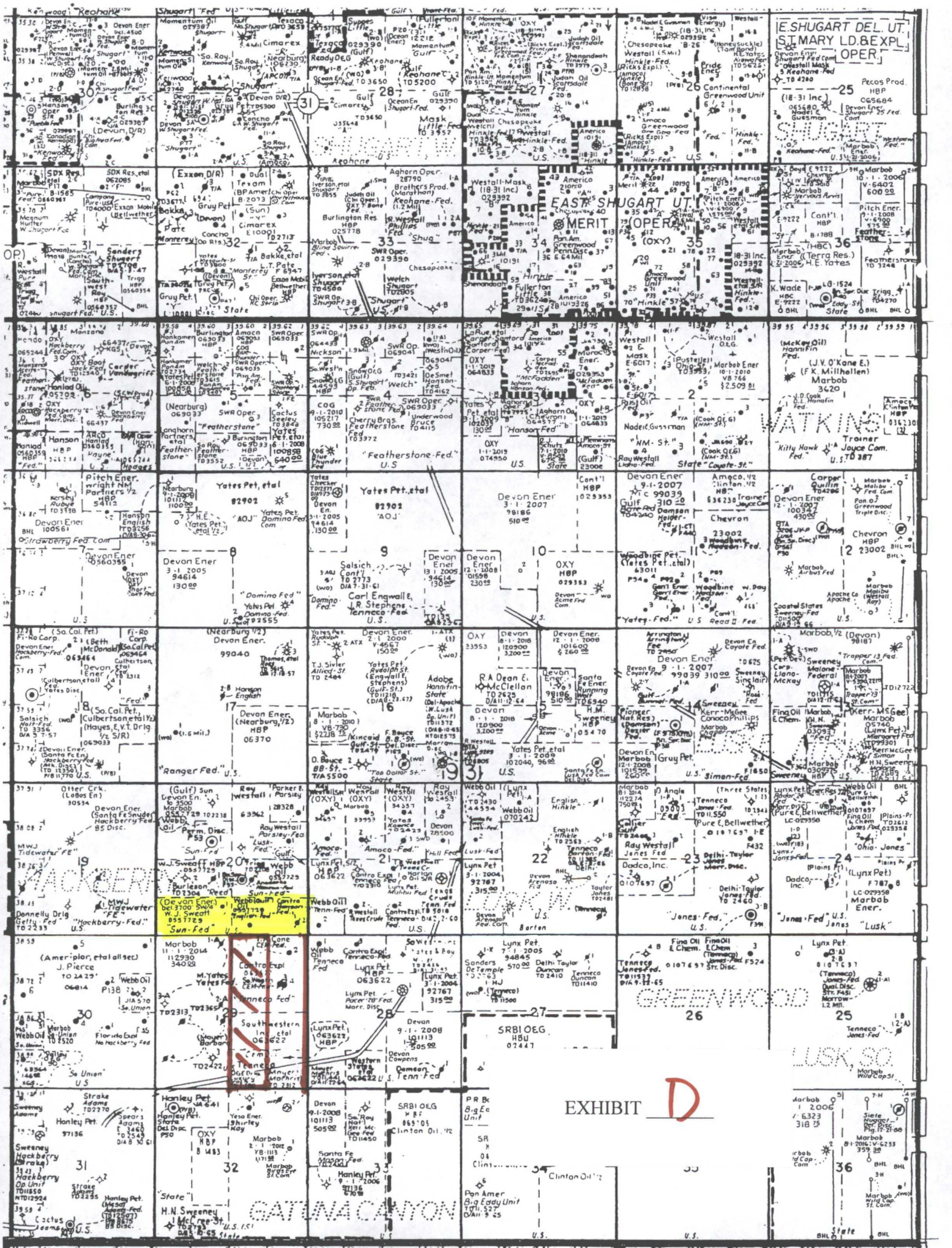


EXHIBIT D

GATINACAN CANYON

LUSK, SO

JAMES BRUCE
ATTORNEY AT LAW

POST OFFICE BOX 1056
SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213
SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone)
(505) 660-6612 (Cell)
(505) 982-2151 (Fax)

jamesbruc@aol.com

December 13, 2011

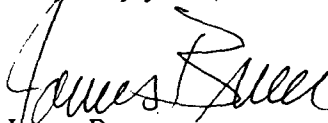
Certified Mail – Return Receipt Requested

To: Persons on Exhibit 1

Ladies and gentlemen:

Devon Energy Production Company, L.P. has filed an application with the New Mexico Oil Conservation Division requesting approval of an unorthodox oil well location in the Bone Spring formation in the W½E½ of Section 29, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico. A copy of the application is enclosed. You own an interest in the affected offsetting acreage. If you object to the application, you must notify the Division in writing no later than 20 days from the date of this letter (the Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505). Failure to object will preclude you from contesting this matter at a later date.

Very truly yours,


James Bruce

Attorney for Devon Energy Production Company, L.P.

EXHIBIT E

Exhibit 1

Chaparral Energy, LLC
701 Cedar Lake
Oklahoma City, OK 73114

COG Operating, LLC
Suite 100
550 West Texas
Midland, Texas 79701

Jay Petroleum, LLC
Suite 810
2425 West Loop
Houston, Texas 77027