					PTHU	
1-12-11 DATEIN	SUSPENSE	ENGINEER ) KB	LOGGED IN/10.11	TYPE NSL	APP NO. //0/2	4100

ABOVE THIS LINE FOR DIVISION USE ONLY

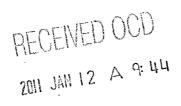
### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



_		ADMINISTRATIVE APPLIC	ATION CHECKLIST	
Tł	HIS CHECKLIST IS N	MANDATORY FOR ALL ADMINISTRATIVE APPLICATION WHICH REQUIRE PROCESSING AT THE D		S AND REGULATIONS
Applic	ation Acronym			
	[DHC-Dow	Indard Location] [NSP-Non-Standard Prora Inhole Commingling] [CTB-Lease Commi Inhole Commingling] [OLS - Off-Lease Stora [WFX-Waterflood Expansion] [PMX-Pres [SWD-Salt Water Disposal] [IPI-Inje Ilified Enhanced Oil Recovery Certification	ingling] [PLC-Pool/Lease Cor nge] [OLM-Off-Lease Measurd ssure Maintenance Expansion] ection Pressure Increase]	nmingling] ement]
[1]	TYPE OF AI	PPLICATION - Check Those Which Apply Location - Spacing Unit - Simultaneous D NSL NSP SD		
	Check [B]	Cone Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC	PC  OLS  OLM	
	[C]	Injection - Disposal - Pressure Increase - I WFX PMX SWD	Enhanced Oil Recovery IPI	
	[D]	Other: Specify		
[2]	NOTIFICAT [A]	ION REQUIRED TO: - Check Those Whi Working, Royalty or Overriding Roy		
	[B]	☐ Offset Operators, Leaseholders or Su	ırface Owner	
	[C]	Application is One Which Requires	Published Legal Notice	
	[D]	Notification and/or Concurrent Appr U.S. Bureau of Land Management - Commissioner of Pu	oval by BLM or SLO	
	[E]	For all of the above, Proof of Notific	ation or Publication is Attached	, and/or,
	[F]	Waivers are Attached		
[3]		CURATE AND COMPLETE INFORMA ATION INDICATED ABOVE.	ATION REQUIRED TO PRO	CESS THE TYPE
	val is <mark>accurate</mark> a	TION: I hereby certify that the information and complete to the best of my knowledge. equired information and notifications are sub	I also understand that no action	
	Note	: Statement must be completed by an individual wi	th managerial and/or supervisory cap	acity.
Print o	Katie McDonnell or Type Name	<u>Xatie McDonnell</u> Signature	Landman Title	
	. Typo I mino	Signiture	Katie McDonnell e-mail Address	•





Devon Energy Corporation 20 North Broadway Oklahoma City, Oklahoma 73102-8260 Fax: 405-552-8113

**FAX** 

To:

**David Brooks** 

**NMOCD** 

From:

Katie McDonnell

Office: 405-552-8040

Fax: 505-476-3462

Date:

January 12, 2011

Phone: 505-476-3450

Pages:

11 (including cover page)

Re: NSL Application - Ichabod 7 Fed #1H

Urgent

Please Comment

□ Please Reply

☐ Please Recycle

• Comments:



Devon Energy Corporation 20 North Broadway Oklahoma City, OK 73102-8260 405 235 3611 Phone www.devonenergy.com

January 12, 2011

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

RE: Ichabod 7 Fed #1H Section 7-T26S-R34E Lea County, New Mexico

#### Gentlemen:

Devon Energy Production Company, L.P. ("Devon"), as Operator, intends to drill the referenced horizontal Bone Spring (Leonard Shale) well to a total vertical depth of 9,858' with a total measured depth of 14,429'. As reflected on the attached C-102, the well has been permitted at a surface location of 195' FSL and 330' FEL with a permitted bottom hole location of 330' FNL and 330' FEL of Section 7-T26S-R34E. We will penetrate the top of the Bone Spring formation at an unorthodox location of 195' FSL and 330' FEL (surface hole location), although the highest perforations in the well will not be closer than 330' to the outer boundary of the project area.

The surface hole location will be non-standard in order to maximize the length of the horizontal portion of the wellbore within the target Bone Spring interval. By spotting the surface hole location 195' from the section line, this allows room to build the curve and land horizontally at a standard location within the target Bone Spring interval. Perforations in the horizontal wellbore in the target Bone Spring interval will be at least 330' from the section lines. If the surface hole location was placed at a standard location (330' from the section lines), this would reduce the productive horizontal interval. With the proposed well plan, the productive interval of the horizontal wellbore within the target Bone Spring interval is maximized.

Inasmuch as the referenced well will penetrate the top of the Bone Spring formation at an unorthodox location from that permitted by the Statewide Pool Rules, Devon respectfully requests that the Commission administratively approve this application for an unorthodox location in accordance with Division Rule 104(F)(3). This unorthodox location affects the leasehold owners in Unit letter A of section 18-T26S-R34E. Chesapeake Energy and Devon are the owners of Federal Oil & Gas lease 114992, which encompasses all of said section 18. In accordance with NMOCD Rules, the affected offset leasehold owner has been given notice of this application. Additionally, Devon requests Commission approval to designate a 160 acre project area consisting of four standard oil spacing units comprised of the E/2 E/2 (Unit letters A, H, I, & P) of Section 7-T26S-R34E.

Attached for your review you will find a land plat, copies of letters of notification to the affected parties, a structure map covering the Top Bone Spring formation, a State of New Mexico form C-102, and a Well Profile Planning Report prepared by CUDD Drilling & Measurement Services.

Feel free to contact the undersigned at (405)552-8040 if there are any concerns or questions regarding this application.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

Katie a McDannell

Katie A. McDonnell Landman

01/19/9011	11:32 FAX 552 8113	· DEVON E	NERGY	☑ 00	4/011
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		, '			

LOVING County



**Devon Energy Corporation** 20 North Broadway Oklahoma City, OK 73102-8260 405 235 3611 Phone www.devonenergy.com

January 12, 2011

Attn: Craig Barnard Chesapeake Energy Corporation P.O. Box 18496 Oklahoma City, OK 73154-0496

Re: Ichabod 7 Fed #1H Section 7-T265-R34E Lea County, NM

### Gentlemen:

Attached you will find Devon Energy Production Company, L.P.'s administrative application for approval of an unorthodox well location covering the referenced well. Our records indicate that Chesapeake Energy, as an owner of Federal Oil & Gas Lease 114992, comprised of Section 18-T26S-R34E, is an affected owner of an offset spacing unit and is entitled to notice of this application in accordance with Division Rule 104(f). In accordance with NMOCD Rules, objections to this application must be filed with the New Mexico Oil Conservation Division within 20 days from the date the OCD receives the application. If you have no objection to this application, please so indicate by signing and returning one copy of this letter to the undersigned via

If there are any questions or if additional information is required, feel free to call me at (405) 552-8040.

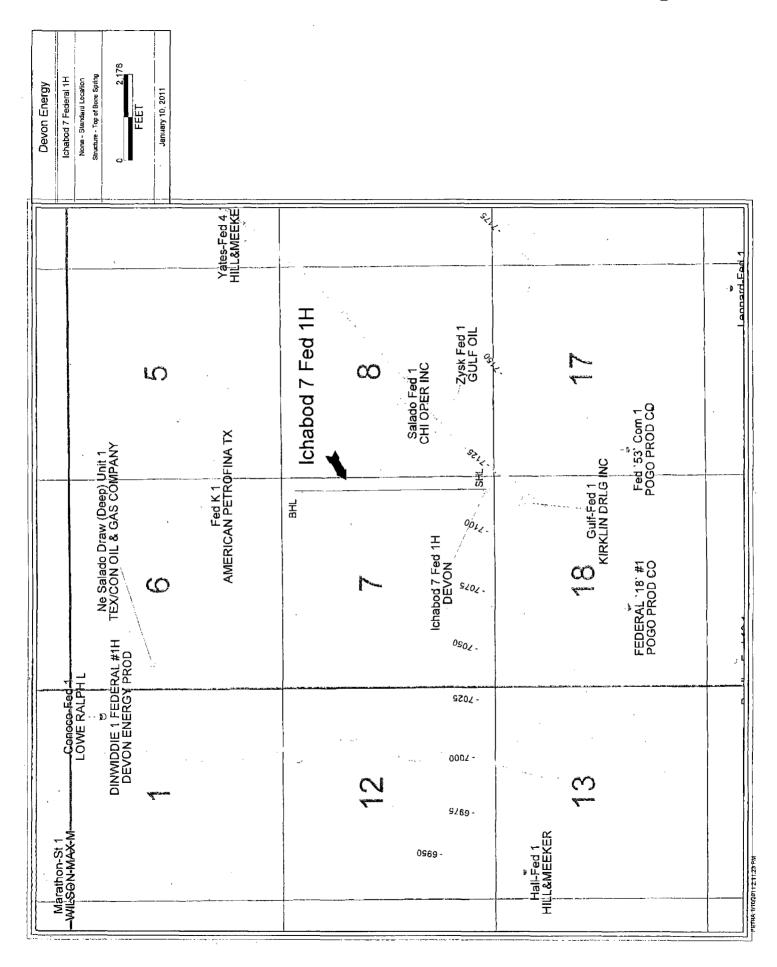
Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

Katie a mcDonnell Katie A. McDonnell

Landman

 $Che sape ake \ Energy\ Corporation\ has\ no\ objection\ to\ this\ administrative\ application\ for\ unorthodox\ location.$ 



District 1
1625 N. French Dr., Hobbs, NM 88240
District II
1501 W. Grand Avenue, Ariesia, 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

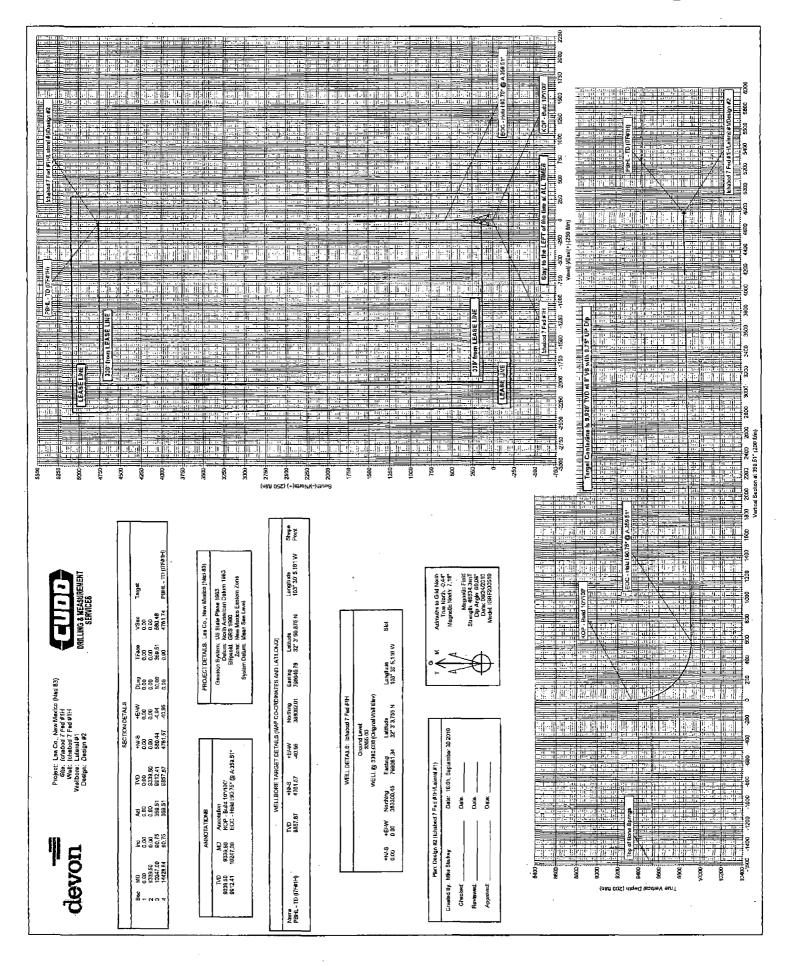
☐ AMENDED REPORT

WFII.	LOCATION	AND	ACREAGE	DEDICA	ΓΙΟΝ PLAT
تعالما المراجع					, , <b>~</b> , , , , , , , , , , , ,

	API Numbe	F		<sup>2</sup> Pani Cade		WC B	Pool Na.	or e		
* Property	Code			A DEPUTATION	Yroperty	Name		<sup>6</sup> Well Number		
					ICHABOD "	'7" FED.		1 <b>H</b>		
OGRID	No.				* Operator	Name			* Elevation	
6137	. [	DEVON ENERGY PRODUCTION COMPANY, L.P.							3363.1	
					<sup>10</sup> Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Fret from the	East/West line	County	
b	7	26 S	34 E		195	SOUTH	330	EAST	LEA	
			" Bo	ttom Ho	le Location I	Different From	n Surface			
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County	
A.	7	26 S	34 E		330	NORTH	330	EAST	LEA	
Dedicated Acre	s 13 Joint o	r Infill	onsolidation	Code 13 Or	rder No.					
	1	l l								

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.

N. Q. CORNER SEC. 7 LAT. = 32'03'54.80"N LAT LONG. = 103'30'32.34"N LONG NMSP EAST (FT) N = 388371.92 E = 796725.43	BOTTOM OF HOLE T. = 32'03'51,56"N S. = 103'30'05,48"W NMSP EAST (FT) N = 388052,01 E = 799040,78	OF HOLE 330	17 OPERATOR CERTIFICATION  i hereby carrify that the information conserved herem is true and complete to the best of my knowledges and belief, and that this or generation either owing a working interest or indicated mineral interest in the land including the proposed bostom hole location or has a right to strill this well as just location pursuant to a condruct with an amove of such a numeral or working interest, or to a valuation, proving agreement or a compulsory poorling order herecofors sustreed by the division.
ICHABOD "7" FED.  ELEV. = 3363.1!  LAT. = 32'03'04.452  LONG. = 103'30'05.  NMSP EAST (FT)  N = 383300.45  E = 799081.34  S. Q. CORNER SEC. 7  LAT. = 32'03'02.52"N  LONG. = 103'30'32.30'W  NMSP EAST (FT)  N = 383087.26  E = 796770.28		SE CORNER SEC. 7 LAT. = 32'03'02.52"N LONG. = 103'30'01.80"W NWSP EAST (FT) N = 383108.02 E = 7994'12.97 SURFACE LOCATION 336'	Signature  Privated Nume  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 vertice of the desit of my belief  SEPTEMBER 2001  Date of Sarvey  Signature and Best of Professional Surveyor  Certificate Number of Professional Surveyor  Certificate Number of Landon Fundamental Surveyor  SURVEY NO. 244





## **Devon Energy**

Lea Co., New Mexico (Nad 83) Ichabod 7 Fed #1H Ichabod 7 Fed #1H

Lateral #1

Plan: Design #2

# **Standard Survey Report**

30 September, 2010





### **CUDD Drilling & Measurement Services**

Survey Report



Company: **Project:** 

Devon Energy

Lea Co., New Mexico (Nad 83)

Site: Well: Ichabod 7 Fed #1H Ichabod 7 Fed #1H

Wellbore: Design:

Lateral #1 Design #2 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference: Site Ichabod 7 Fed #1H

WELL @ 3380.00ft (Original Well Elev) WELL @ 3380.00ft (Original Well Elev)

Survey Calculation Method: Database:

Minimum Curvature

EDM 2003.21 Single User Db

Project

Lea Co., New Mexico (Nad 83)

Map System: Geo Datum:

Map Zone:

US State Plane 1983

New Mexico Eastern Zone

North American Datum 1983

System Datum:

Mean Sea Level

Site

Ichabod 7 Fed #1H, Sec 7, T-26S, R-34E

Site Position: From:

Map

Northing: Easting:

383,300.45 ft 799,081.34 ft

Longitude:

32° 3' 3.755 N 103° 30' 5.116 W

Position Uncertainty:

0.00 ft

Slot Radius:

**Grid Convergence:** 

0.44 °

Well Well Position Ichabod 7 Fed #1H +N/-S 0.00 ft +E/-W

Model Name

IGRF200510

Northing: Easting:

383,300.45 ft 799,081.34 ft

Latitude: Longitude:

32° 3' 3,755 N 103° 30' 5,116 W

Position Uncertainty

0.00 ft 0.00 ft

Wellhead Elevation:

08/24/10

3,380.00 ft

7.63

**Ground Level:** 

3,355.00 ft

Wellbore

Lateral #1

Magnetics

Sample Date

Declination (°)

Dip Angle (")

Field Strength

48,634

Design

Design #2

**Audit Notes:** 

Version:

PLAN

Tie On Depth:

0.00

60.08

Vertical Section:

Depth From (TVD) (ft) 0.00

+N/-S (fit)

0.00

+E/-W **(ft)** 0.00

Direction (°) 359.51

Survey Tool Program

Date 09/30/10

From (ft):

To

0.00

9,200.00

Survey (Wellbore) 9,200.00 Design #2 (Lateral #1)

14,428.64 Design #2 (Lateral #1)

Tool Name NS-GYRO-MS

CUDD MWD

Description

North sensing gyrocompassing m/s MWD - Standard CUDD MWD

**Planned Survey** 

Measured Depth . (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/180ft)	Build Rate (°/100ft)	Turn Rate (*/100ft)
0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00
5,241.00	0,00	0.00	5,241.00	0.00	0.00	0.00	0.00	0.00	0.00
Beil Canyon 6,292.00	0.00	0.00	6,292.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyo 8,307.00	on 0.00	0.00	8,307.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Cany 9,339.50	on 0.00	0,00	9,339.50	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 1	10*/100*		•						
9,522.73	18.32	359.51	9,519.62	29.05	-0,25	29,05	10.00	10.00	0.00
Top of Bone	Sarings								



### **CUDD Drilling & Measurement Services**

Survey Report



Company: Project

Devon Energy

Lea Co., New Mexico (Nad 83)

Site:

Ichabod 7 Fed #1H

Well;

Ichabod 7 Fed #1H

Wellbors: Design:

Lateral #1 Design #2 Local Co-ordinate Reference:

TVD Reference:

WELL @ 3380.00ft (Original Well Elev)

MD Reference:

Site Ichabod 7 Fed #1H WELL @ 3380.00ft (Original Well Elev)

North Reference:

Grid

Survey Calculation Method: Database:

Minimum Curvature

EDM 2003.21 Single User Db

Planned	Survey

deasured			Vertical			Vertical	Dogleg	Build	Tum
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (*/100ft)	Rate (°/100fi)	Rate (°/100ft)
10,247.00	90.75	359.51	9,912.41	580.44	-4,94	580.46	10.00	10.00	0.00
EOC - Hold I	:90.75* @ A:359.	.51*							
14,428,64	90.75	359.51	9,857.67	4,761.57	-40.56	4.761.74	0.00	0.00	0.00

Design Targets									
Target Name - hit/mlss target - Shape	Dip Angle (°)	Dip Dir.	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL - TD (I7F#1H) - plan hits target ce - Point	0.00 Inter	359.55	9,857.67	4,761.57	<b>-4</b> 0.56	388,062.01	799,040.78	32" 3' 50.875 N	103° 30' 5.161 W

Formations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dìp (°)	Dip · Direction (°)	
-	5,241,00	5,241.00	Bell Canyon		-0.75	359,55	,
		•					
	6,292.00	•	Cherry Canyon		-0.75	359,55	
	8,307.00	8,307.00	Brushy Canyon		-0.75	359,55	i
	9,522.73	9,520.00	Top of Bone Springs		-0.75	359.55	

Plan Annota	tions			· · ·		
	Measured Vertical		Local Coor	dinates		
	Depth	Depth	+N/-S	+E/-W		
	(ft)	(ft) ·	(ft)	(ft)	Comment	
	9,339.50	9,339.50	0.00	0.00	KOP - Build 10*/100*	
	10,247.00	9,912.41	580.44	-4.94	EOC - Hald I:90.75* @ A:359.51*	

	•		
Checked By:	Approved By:	Da	te:

### Brooks, David K., EMNRD

From:

Brooks, David K., EMNRD

Sent:

Wednesday, January 26, 2011 11:47 AM

To:

'McDonnell, Katie'

Subject:

Ichabod 7 Federal #1h; NSL Application

Dear Ms. McDonnell

I have in hand the referenced application.

The proposed surface location and penetration point, in addition to encroaching toward Unit A of Section 18, appears to encroach diagonally toward Unit D of Section 17, pursuant to our policy that there is a diagonal encroachment whenever the proposed location is closer to a common corner than the closest standard location would be to that corner.

We show no well in Section 17, and the map copy you have filed shows it as Chesapeake acreage, in which case no further notice would be required. If this is the case, please confirm, and we can proceed. If there are working interest owners in D of 17 other than Devon and Chesapeake, additional notice would be required.

Sincerely

David K. Brooks Legal Examiner

### Brooks, David K., EMNRD

From:

McDonnell, Katie [Katie.McDonnell@dvn.com]

Sent:

Thursday, January 27, 2011 6:21 AM

To:

Brooks, David K., EMNRD

Subject:

RE: Ichabod 7 Federal #1h; NSL Application

Mr. Brooks - Devon and Chesapeake are the only 2 working interest owners of that entire section 17. Thank you for catching my oversight.

I appreciate your help.

Thanks,

Katie McDonnell

From: Brooks, David K., EMNRD [mailto:david.brooks@state.nm.us]

Sent: Wednesday, January 26, 2011 12:47 PM

To: McDonnell, Katie

Subject: Ichabod 7 Federal #1h; NSL Application

Dear Ms. McDonnell

I have in hand the referenced application.

The proposed surface location and penetration point, in addition to encroaching toward Unit A of Section 18, appears to encroach diagonally toward Unit D of Section 17, pursuant to our policy that there is a diagonal encroachment whenever the proposed location is closer to a common corner than the closest standard location would be to that corner.

We show no well in Section 17, and the map copy you have filed shows it as Chesapeake acreage, in which case no further notice would be required. If this is the case, please confirm, and we can proceed. If there are working interest owners in D of 17 other than Devon and Chesapeake, additional notice would be required.

Sincerely

David K. Brooks Legal Examiner

**Confidentiality Warning:** This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.