

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMMN116574

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
BELL LAKE 24 FED 4H

2. Name of Operator
DEVON ENERGY PRODUCTION CO LP

Contact: DAVID H COOK

9. API Well No.
30-025-41304-00-X1

3a. Address
333 WEST SHERIDAN AVE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405.552.7848

10. Field and Pool, or Exploratory
WC-025 G07 S243225C

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 24 T24S R32E SWSE 200FSL 2030FEL

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☒ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Co., L.P. respectfully requests to modify the production casing program and cement program as follows:

Change the casing size to 7", 29ppf, BTC HCP-110 for the interval of 0- 10,631'(KOP) & 5-1/2", 17ppf, BTC, HCP-110 for the interval of 10,631'- 15,873'(new TD).

Change production cement program from a 2 stage cement program to a single stage cement program.

Revised data within Drill Plan is highlighted in yellow.

Please see the attached revised Drill Plan and Direction Surveys.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #240907 verified by the BLM Well Information System

For DEVON ENERGY PRODUCTION CO LP, sent to the Hobbs

Committed to AFMS for processing by CHRISTOPHER WALLS on 04/11/2014 (14CRW0139SE)

Name (Printed/Typed) DAVID H COOK

Title

Signature (Electronic Submission)

Date 04/02/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

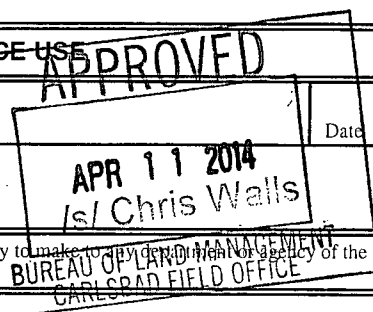
Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

APR 21 2014

K2

DRILLING PROGRAM

Devon Energy Production Company, LP

Bell Lake 24 Fed 4H

Surface Location: 200 FSL & 2030 FEL, Unit O, Sec 24 T24S R32E, Lea, NM

Bottom Hole Location: 330 FNL & 1980 FWL, Unit C, Sec 24 T24S R32E, Lea, NM

1. Geologic Name of Surface Formation

- a. Quaternary

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

a. Fresh Water	200'	
b. Rustler	1,078'	
c. Top of Salt	1,410'	
d. Base of Salt	4,750'	
e. Delaware	4,950'	Oil & Gas
f. Bone Spring	8,950'	Oil & Gas
g. 1 st Bone Spring Sand	10,030'	Oil & Gas
h. 2 nd Bone Spring Sand	10,582'	Oil & Gas

Total Depth 15,873' MD 11,050' TVD

3. Casing Program: (All casing is new and API approved.)

<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'-1,195'	13 3/8"	0'-1,195'	48#	ST&C	H-40
12 1/4"	1,150'-4,900'	9 5/8"	0'-4,900'	40#	LT&C	HCK-55
8 3/4"	4,900'-15,684'	7"	0'-10,631'	29#	BT&C	HCP-110
8 3/4"	15,684'-15,873'	5 1/2"	10,631'-15,873'	17#	BT&C	HCP-110

Design Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8", 48#, H-40, ST&C	1.43	3.21	5.83
9-5/8", 40#, HCK-55, LT&C	1.66	1.38	3.21
7" 29# HCP-110 BTC	1.75	2.31	2.93
5-1/2" 17# HCP-110 BTC	1.72	2.31	3.14

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

13 3/8" Surface **Lead:** 520 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg

Yield: 1.75 cf/sk

TOC @ surface

Tail: 515 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg

Yield: 1.35 cf/sk

9-5/8" Intermediate **Lead:** 1085 sacks (65:35) Class C Cement:Poz (Fly Ash): + 5% bwoc Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg

Yield: 1.85 cf/sk

TOC @ surface

Tail: 360 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg

Yield: 1.33 cf/sk

7 x 5-1/2" Production

Lead: 470 sacks Tuned Light Cement + 0.125 lbs/sack Poly-E-Flake + 76.2% FW, 11.0 ppg, Water volume: 14.98 g/sack

Yield: 2.66 cf/sk

Tail: 1430 sacks (50:50) Class H Cement:Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 59.3% Fresh Water, 14.5 ppg, Water volume: 5.31 g/sack

Yield: 1.20 cf/sk

TOC @ 4,400' ft

The above cement volumes could be revised pending the caliper measurement from the open hole logs.

5. Pressure Control Equipment

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

The pipe rams 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 annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0 – 1,195	8.4 – 9.0	30 – 34	N/C	FW
1,195 – 4,900	9.8 – 10.0	28 – 32	N/C	Brine
4,900 – 15,873	8.6 – 9.0	28 – 32	N/C-12	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

7. **Auxiliary Well Control and Monitoring Equipment:**
- a. A Kelly cock will be in the drill string at all times.
 - b. 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:**
- 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. 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 4,850 psi and Estimated BHT 165°. No H₂S is anticipated to be encountered.
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 25 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.

KB-3579
GL-3554

Plan Data for Bell Lake 24 Fed 4H

Plan Point Information:									
Dogleg Severity Unit: °/100.00ft									
Position offsets from Slot centre									
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	435923.39	760016.11	0.00	0.00
5439.00	0.00	0.00	5439.00	0.00	0.00	435923.39	760016.11	0.00	0.00
5939.18	10.00	257.68	5936.64	-9.29	-42.55	435914.10	759973.56	-6.17	2.00
10642.12	10.00	257.68	10568.08	-183.64	-840.67	435739.75	759175.44	-121.87	0.00
11403.86	90.00	355.82	11050.00	286.28	-959.39	436209.67	759056.72	355.45	12.00
15873.86	90.00	355.82	11050.00	4744.39	-1285.21	440667.78	758730.90	4825.45	0.00

devon



Bell Lake 24 Fed 4H
Lea Co, NM

Bell Lake 24 Fed 4H	_____
Bell Lake 24 Fed 3H	_____
Bell Lake 24 Fed 2H	_____
Bell Lake 24 Fed 2H	_____
Bell Lake 24 Fed 3H	_____
Bell Lake 24 Fed 3H	_____

Plan Data for Bell Lake 24 Fed 4H

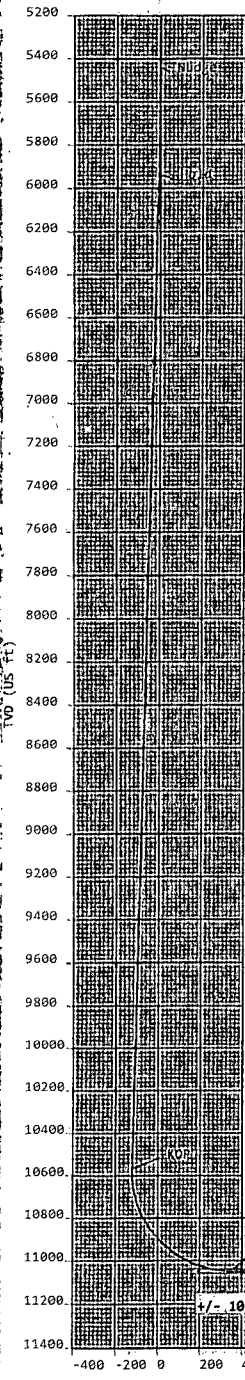
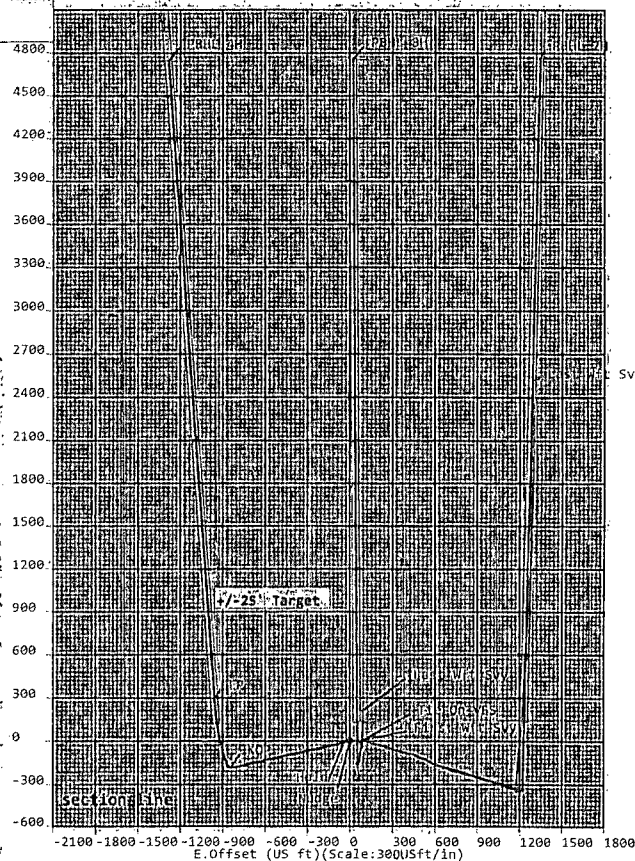
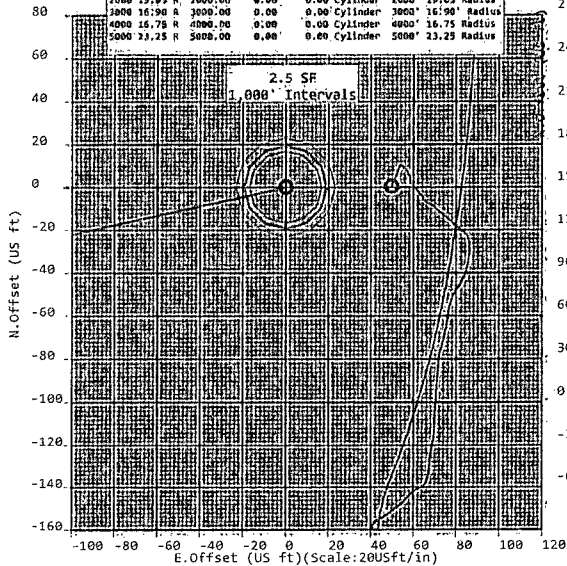
Target Set Information:									
Name: Bell Lake 24 Fed 4H									
Position offsets from Slot centre									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment		
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)				
Lp.Tgt	11050.00	125.84	-947.95	436049.23	759068.16	Cuboid			
PBHL 4H	11050.00	4744.39	-1285.21	440667.78	758730.90	Cuboid			

Plan Data for Bell Lake 24 Fed 4H

Slot: Bell Lake 24 Fed 4H
Position:
Offset is from Site centre
+N/-S: -0.83USft Northing: 435923.39USft Latitude: 32°11'47.2"
+E/-W: -99.96USft Easting: 760016.11USft Longitude: -103°37'35.8"
Elevation Above VRD: 3554.00USft

Plan Data for Bell Lake 24 Fed 4H

Target Set Information:									
Name: Bell Lake 24 Fed 4H									
Position offsets from Slot centre									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment		
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)				
Lp.Tgt	11050.00	125.84	-947.95	436049.23	759068.16	Cuboid			
PBHL 4H	11050.00	4744.39	-1285.21	440667.78	758730.90	Cuboid			
1000	19.77	R	1000.00	0.00	0.00	Cylinder	1000'	19.77	Radius
2000	19.95	R	2000.00	0.00	0.00	Cylinder	2000'	19.95	Radius
3000	16.90	R	3000.00	0.00	0.00	Cylinder	3000'	16.90	Radius
4000	16.78	R	4000.00	0.00	0.00	Cylinder	4000'	16.78	Radius
5000	21.25	R	5000.00	0.00	0.00	Cylinder	5000'	21.25	Radius



Sign Off: Russell Joyner

5D Plan Report**Devon Energy**

Field Name: *Lea Co, NM Nad 83 NM*
Site Name: *Bell Lake 24 Fed 2,3,4H Pad*
Well Name: *Bell Lake 24 Fed 4H*
Plan: *P2:V4*

01 April 2014

**Weatherford®**

Bell Lake 24 Fed 4H

Field Name Lea Co NM Nad 89 NM	Map Units : US ft Company Name : Devon Energy Vertical Reference Datum (VRD) : Mean Sea Level Projected Coordinate System : NAD83 / New Mexico-East (ftUS) Comment :	
Site Name Bell Lake 24 Fed 2.9.4H Pad	Units : US ft North Reference : Grid Convergence Angle : 0.38 Position Northing : 435924.22 US ft Latitude : 32°11'47.24" Easting : 760116.07 US ft Longitude : 103°37'33.83" Elevation above Mean Sea Level: 3554.00 US ft Comment :	
Slot Name Bell Lake 24 Fed 4H	Position (Offsets relative to Site Centre) +N / -S : 0.83 US ft Northing : 435923.39 US ft Latitude : 32°11'47.24" +E / -W : 99.96 US ft Easting : 760016.11 US ft Longitude : 103°37'35.00" Slot TVD Reference : Ground Elevation Elevation above Mean Sea Level : 3554.00 US ft Comment :	
Well Name Bell Lake 24 Fed 4H	Type : Main well UWI : Plan : P2:V4 Rig Height Drill Floor : 25.00 US ft Comment : Relative to Mean Sea Level: 3579.00 US ft Closure Distance : 4915.38 US ft Closure Azimuth : 344.843° Vertical Section (Position of Origin Relative to Slot) +N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 355.82° Magnetic Parameters Model : BGGM Field Strength : 48321.0nT Dec : 7.38° Dip : 60.07° Date : 25/Mar/2014	

Target Set

Name : Bell Lake 24 Fed 4H **Number of Targets :** 7

Comment :

Target Name: Lp Tgt	Position (Relative to Slot centre) +N / -S : 125.84 US ft Northing : 436049.23 US ft Latitude : 32°11'48.54" +E / -W : -947.95 US ft Easting : 759068.16 US ft Longitude : 103°37'46.02"	
Shape: Cuboid	TVD (Drill Floor) : 11050.00 US ft Orientation Azimuth : 0.00° Inclination : 0.00° Dimensions Length : 0.00 US ft Breadth : 0.00 US ft Height : 0.00 US ft	

Target Name: PBHL 4H Shape: Cuboid	Position (Relative to Slot centre) +N / -S : 4744.39US ft +E / -W : -1285.21 US ft TVD (Drill Floor) : 11050.00 US ft Orientation Azimuth : 355.82° Dimensions Length : 9260.00 US ft Inclination : 0.00° Breadth : 50.00 US ft Height : 20.00 US ft
Target Name: 1000-19.72R Shape: Cylinder	Position (Relative to Slot centre) +N / -S : 0.00US ft +E / -W : 0.00US ft TVD (Drill Floor) : 1000.00 US ft Orientation Azimuth : 0.00° Dimensions Radius : 19.72 US ft Inclination : 0.00° Length : 2.00 US ft
Target Name: 2000-19.05R Shape: Cylinder	Position (Relative to Slot centre) +N / -S : 0.00US ft +E / -W : 0.00US ft TVD (Drill Floor) : 2000.00 US ft Orientation Azimuth : 0.00° Dimensions Radius : 19.05 US ft Inclination : 0.00° Length : 2.00 US ft
Target Name: 3000-16.90R Shape: Cylinder	Position (Relative to Slot centre) +N / -S : 0.00US ft +E / -W : 0.00US ft TVD (Drill Floor) : 3000.00 US ft Orientation Azimuth : 0.00° Dimensions Radius : 16.90 US ft Inclination : 0.00° Length : 2.00 US ft
Target Name: 4000-16.75R Shape: Cylinder	Position (Relative to Slot centre) +N / -S : 0.00US ft +E / -W : 0.00US ft TVD (Drill Floor) : 4000.00 US ft Orientation Azimuth : 0.00° Dimensions Radius : 16.75 US ft Inclination : 0.00° Length : 2.00 US ft
Target Name: 5000-23.25R Shape: Cylinder	Position (Relative to Slot centre) +N / -S : 0.00US ft +E / -W : 0.00US ft TVD (Drill Floor) : 5000.00 US ft Orientation Azimuth : 0.00° Dimensions Radius : 16.75 US ft Inclination : 0.00° Length : 2.00 US ft

5D Plan Report

Shape: Cylinder	Orientation Azimuth : 0.00°	Inclination : 0.00°
	Dimensions Radius : 23.25 US ft	Length : 2.00 US ft

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Drill Floor)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	PLS (°/100 US ft)	VS (US ft)	B Rate (°/100 US ft)	I Rate (°/100 US ft)	T Face (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5439.00	0.00	0.00	5439.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nudge
5939.18	10.00	257.68	5936.64	-9.29	-42.55	2.00	-6.17	2.00	0.00	257.68	Hold
10642.12	10.00	257.68	10568.08	-183.64	-840.67	0.00	-121.87	0.00	0.00	0.00	KOP
11403.86	90.00	355.82	11050.00	286.28	-959.39	12.00	355.45	10.50	12.88	98.02	LP
15873.86	90.00	355.82	11050.00	4744.39	-1285.21	0.00	4825.45	0.00	0.00	0.00	PBHL 4H

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	PLS (°/100 US ft)	Northing (US ft)	Easting (US ft)		Comment
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	435923.39	760016.11		
5439.00	0.00	0.00	5439.00	0.00	0.00	0.00	0.00	435923.39	760016.11		Nudge
5500.00	1.22	257.68	5500.00	-0.14	-0.63	-0.09	2.00	435923.25	760015.48		
5600.00	3.22	257.68	5599.92	-0.97	-4.42	-0.64	-2.00	435922.42	760011.69		
5700.00	5.22	257.68	5699.64	-2.54	-11.61	-1.68	2.00	435920.85	760004.50		
5800.00	7.22	257.68	5799.05	-4.85	-22.19	-3.22	2.00	435918.54	759993.92		
5900.00	9.22	257.68	5898.01	-7.90	-36.16	-5.24	2.00	435915.49	759979.95		
5939.18	10.00	257.68	5936.64	-9.29	-42.55	-6.17	2.00	435914.10	759973.56		Hold
6000.00	10.00	257.68	5996.54	-11.55	-52.87	-7.66	0.00	435911.84	759963.24		
6100.00	10.00	257.68	6095.02	-15.26	-69.84	-10.13	0.00	435908.13	759946.27		
6200.00	10.00	257.68	6193.50	-18.96	-86.81	-12.59	0.00	435904.43	759929.30		
6300.00	10.00	257.68	6291.98	-22.67	-103.78	-15.05	0.00	435900.72	759912.33		
6400.00	10.00	257.68	6390.46	-26.38	-120.76	-17.51	0.00	435897.01	759895.35		
6500.00	10.00	257.68	6488.94	-30.08	-137.73	-19.97	0.00	435893.31	759878.38		
6600.00	10.00	257.68	6587.42	-33.79	-154.70	-22.43	0.00	435889.60	759861.41		
6700.00	10.00	257.68	6685.90	-37.50	-171.67	-24.89	0.00	435885.89	759844.44		
6800.00	10.00	257.68	6784.38	-41.21	-188.64	-27.35	0.00	435882.18	759827.47		
6900.00	10.00	257.68	6882.86	-44.91	-205.61	-29.81	0.00	435878.48	759810.50		
7000.00	10.00	257.68	6981.33	-48.62	-222.58	-32.27	0.00	435874.77	759793.53		
7100.00	10.00	257.68	7079.81	-52.33	-239.55	-34.73	0.00	435871.06	759776.56		
7200.00	10.00	257.68	7178.29	-56.03	-256.52	-37.19	0.00	435867.36	759759.59		
7300.00	10.00	257.68	7276.77	-59.74	-273.49	-39.65	0.00	435863.65	759742.62		
7400.00	10.00	257.68	7375.25	-63.45	-290.46	-42.11	0.00	435859.94	759725.65		
7500.00	10.00	257.68	7473.73	-67.16	-307.43	-44.57	0.00	435856.23	759708.68		
7600.00	10.00	257.68	7572.21	-70.86	-324.40	-47.03	0.00	435852.53	759691.71		
7700.00	10.00	257.68	7670.69	-74.57	-341.37	-49.49	0.00	435848.82	759674.74		
7800.00	10.00	257.68	7769.17	-78.28	-358.35	-51.95	0.00	435845.11	759657.76		
7900.00	10.00	257.68	7867.65	-81.98	-375.32	-54.41	0.00	435841.41	759640.79		
8000.00	10.00	257.68	7966.13	-85.69	-392.29	-56.87	0.00	435837.70	759623.82		
8100.00	10.00	257.68	8064.61	-89.40	-409.26	-59.33	0.00	435833.99	759606.85		
8200.00	10.00	257.68	8163.09	-93.11	-426.23	-61.79	0.00	435830.28	759589.88		
8300.00	10.00	257.68	8261.57	-96.81	-443.20	-64.25	0.00	435826.58	759572.91		
8400.00	10.00	257.68	8360.05	-100.52	-460.17	-66.71	0.00	435822.87	759555.94		
8500.00	10.00	257.68	8458.53	-104.23	-477.14	-69.17	0.00	435819.16	759538.97		
8600.00	10.00	257.68	8557.01	-107.93	-494.11	-71.63	0.00	435815.46	759522.00		
8700.00	10.00	257.68	8655.49	-111.64	-511.08	-74.09	0.00	435811.75	759505.03		
8800.00	10.00	257.68	8753.97	-115.35	-528.05	-76.55	0.00	435808.04	759488.06		
8900.00	10.00	257.68	8852.45	-119.05	-545.02	-79.01	0.00	435804.34	759471.09		

SD Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Drill floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
9000.00	10.00	257.68	8950.93	-122.76	-561.99	-81.47	0.00	435800.63	759454.12	
9100.00	10.00	257.68	9049.41	-126.47	-578.97	-83.93	0.00	435796.92	759437.14	
9200.00	10.00	257.68	9147.89	-130.18	-595.94	-86.39	0.00	435793.21	759420.17	
9300.00	10.00	257.68	9246.37	-133.88	-612.91	-88.85	0.00	435789.51	759403.20	
9400.00	10.00	257.68	9344.85	-137.59	-629.88	-91.31	0.00	435785.80	759386.23	
9500.00	10.00	257.68	9443.33	-141.30	-646.85	-93.77	0.00	435782.09	759369.26	
9600.00	10.00	257.68	9541.81	-145.00	-663.82	-96.23	0.00	435778.39	759352.29	
9700.00	10.00	257.68	9640.29	-148.71	-680.79	-98.69	0.00	435774.68	759335.32	
9800.00	10.00	257.68	9738.77	-152.42	-697.76	-101.15	0.00	435770.97	759318.35	
9900.00	10.00	257.68	9837.25	-156.13	-714.73	-103.61	0.00	435767.26	759301.38	
10000.00	10.00	257.68	9935.73	-159.83	-731.70	-106.07	0.00	435763.56	759284.41	
10100.00	10.00	257.68	10034.21	-163.54	-748.67	-108.53	0.00	435759.85	759267.44	
10200.00	10.00	257.68	10132.69	-167.25	-765.64	-110.99	0.00	435756.14	759250.47	
10300.00	10.00	257.68	10231.17	-170.95	-782.61	-113.45	0.00	435752.44	759233.50	
10400.00	10.00	257.68	10329.64	-174.66	-799.59	-115.91	0.00	435748.73	759216.52	
10500.00	10.00	257.68	10428.12	-178.37	-816.56	-118.38	0.00	435745.02	759199.55	
10600.00	10.00	257.68	10526.60	-182.08	-833.53	-120.84	0.00	435741.31	759182.58	
10642.12	10.00	257.68	10568.08	-183.64	-840.67	-121.87	0.00	435739.75	759175.44	KOP
10700.00	11.33	295.22	10625.03	-182.28	-850.74	-119.79	12.00	435741.11	759165.37	
10800.00	20.06	327.26	10721.37	-163.60	-868.98	-99.83	12.00	435759.79	759147.13	
10900.00	31.01	338.93	10811.52	-124.99	-887.58	-59.97	12.00	435798.40	759128.53	
11000.00	42.49	344.83	10891.54	-68.15	-905.74	-1.95	12.00	435855.24	759110.37	
11100.00	54.16	348.58	10957.92	4.44	-922.67	71.69	12.00	435927.83	759093.44	
11200.00	65.92	351.35	11007.77	89.62	-937.63	157.72	12.00	436013.01	759078.48	
11300.00	77.73	353.64	11038.91	183.65	-949.95	252.40	12.00	436107.04	759066.16	
11400.00	89.54	355.74	11049.98	282.43	-959.11	351.59	12.00	436205.82	759057.00	
11403.86	90.00	355.82	11050.00	286.28	-959.39	355.45	12.00	436209.67	759056.72	LP
11500.00	90.00	355.82	11050.00	382.16	-966.40	451.59	0.00	436305.55	759049.71	
11600.00	90.00	355.82	11050.00	481.90	-973.69	551.59	0.00	436405.29	759042.42	
11700.00	90.00	355.82	11050.00	581.63	-980.98	651.59	0.00	436505.02	759035.13	
11800.00	90.00	355.82	11050.00	681.36	-988.27	751.59	0.00	436604.75	759027.84	
11900.00	90.00	355.82	11050.00	781.10	-995.55	851.59	0.00	436704.49	759020.56	
12000.00	90.00	355.82	11050.00	880.83	-1002.84	951.59	0.00	436804.22	759013.27	
12100.00	90.00	355.82	11050.00	980.57	-1010.13	1051.59	0.00	436903.96	759005.98	
12200.00	90.00	355.82	11050.00	1080.30	-1017.42	1151.59	0.00	437003.69	758998.69	
12300.00	90.00	355.82	11050.00	1180.03	-1024.71	1251.59	0.00	437103.42	758991.40	
12400.00	90.00	355.82	11050.00	1279.77	-1032.00	1351.59	0.00	437203.16	758984.11	
12500.00	90.00	355.82	11050.00	1379.50	-1039.29	1451.59	0.00	437302.89	758976.82	
12600.00	90.00	355.82	11050.00	1479.24	-1046.58	1551.59	0.00	437402.63	758969.53	
12700.00	90.00	355.82	11050.00	1578.97	-1053.87	1651.59	0.00	437502.36	758962.24	
12800.00	90.00	355.82	11050.00	1678.70	-1061.16	1751.59	0.00	437602.09	758954.95	
12900.00	90.00	355.82	11050.00	1778.44	-1068.44	1851.59	0.00	437701.83	758947.67	
13000.00	90.00	355.82	11050.00	1878.17	-1075.73	1951.59	0.00	437801.56	758940.38	
13100.00	90.00	355.82	11050.00	1977.91	-1083.02	2051.59	0.00	437901.30	758933.09	
13200.00	90.00	355.82	11050.00	2077.64	-1090.31	2151.59	0.00	438001.03	758925.80	
13300.00	90.00	355.82	11050.00	2177.37	-1097.60	2251.59	0.00	438100.76	758918.51	
13400.00	90.00	355.82	11050.00	2277.11	-1104.89	2351.59	0.00	438200.50	758911.22	
13500.00	90.00	355.82	11050.00	2376.84	-1112.18	2451.59	0.00	438300.23	758903.93	
13600.00	90.00	355.82	11050.00	2476.58	-1119.47	2551.59	0.00	438399.97	758896.64	
13700.00	90.00	355.82	11050.00	2576.31	-1126.76	2651.59	0.00	438499.70	758889.35	
13800.00	90.00	355.82	11050.00	2676.04	-1134.05	2751.59	0.00	438599.43	758882.06	
13900.00	90.00	355.82	11050.00	2775.78	-1141.33	2851.59	0.00	438699.17	758874.78	
14000.00	90.00	355.82	11050.00	2875.51	-1148.62	2951.59	0.00	438798.90	758867.49	
14100.00	90.00	355.82	11050.00	2975.25	-1155.91	3051.59	0.00	438898.64	758860.20	
14200.00	90.00	355.82	11050.00	3074.98	-1163.20	3151.59	0.00	438998.37	758852.91	
14300.00	90.00	355.82	11050.00	3174.71	-1170.49	3251.59	0.00	439098.10	758845.62	
14400.00	90.00	355.82	11050.00	3274.45	-1177.78	3351.59	0.00	439197.84	758838.33	
14500.00	90.00	355.82	11050.00	3374.18	-1185.07	3451.59	0.00	439297.57	758831.04	
14600.00	90.00	355.82	11050.00	3473.92	-1192.36	3551.59	0.00	439397.31	758823.75	

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14700.00	90.00	355.82	11050.00	3573.65	-1199.65	3651.59	0.00	439497.04	758816.46	
14800.00	90.00	355.82	11050.00	3673.38	-1206.94	3751.59	0.00	439596.77	758809.17	
14900.00	90.00	355.82	11050.00	3773.12	-1214.22	3851.59	0.00	439696.51	758801.89	
15000.00	90.00	355.82	11050.00	3872.85	-1221.51	3951.59	0.00	439796.24	758794.60	
15100.00	90.00	355.82	11050.00	3972.59	-1228.80	4051.59	0.00	439895.98	758787.31	
15200.00	90.00	355.82	11050.00	4072.32	-1236.09	4151.59	0.00	439995.71	758780.02	
15300.00	90.00	355.82	11050.00	4172.05	-1243.38	4251.59	0.00	440095.44	758772.73	
15400.00	90.00	355.82	11050.00	4271.79	-1250.67	4351.59	0.00	440195.18	758765.44	
15500.00	90.00	355.82	11050.00	4371.52	-1257.96	4451.59	0.00	440294.91	758758.15	
15600.00	90.00	355.82	11050.00	4471.26	-1265.25	4551.59	0.00	440394.65	758750.86	
15700.00	90.00	355.82	11050.00	4570.99	-1272.54	4651.59	0.00	440494.38	758743.57	
15800.00	90.00	355.82	11050.00	4670.72	-1279.83	4751.59	0.00	440594.11	758736.28	
15873.86	90.00	355.82	11050.00	4744.39	-1285.21	4825.45	0.00	440667.78	758730.90	PBHL 4H

5D Anti-Collision Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NM***Site Name:** *Bell Lake 24 Fed: 2,3,4H Pad***Well Name:** *Bell Lake 24 Fed: 4H*

01 April 2014

**Weatherford®**


Weatherford®
Bell Lake 24 Fed 4H

Field Name Lea Co, NM Nad 89 NM	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
Projected Coordinate System : NAD83 / New Mexico East (ftUS).				
Comment :				
Site Name Bell Lake 24 Fed 2,3,4H Pad	Units: US ft	North Reference : Grid	Convergence Angle : 0.38	
	Position	Northing : 435924.22 US ft	Latitude : 32° 11' 47.24"	
		Easting : 760116.07 US ft	Longitude : -103° 37' 33.83"	
Elevation above Mean Sea Level: 3554.00 US ft				
Comment :				
Slot Name Bell Lake 24 Fed 4H	Position (Offsets relative to Site Centre)			
	+N / -S : -0.83 US ft	Northing : 435923.39 US ft	Latitude : 32° 11' 47.24"	
	+E / -W : -99.96 US ft	Easting : 760016.11 US ft	Longitude : -103° 37' 35.00"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3554.00 US ft				
Comment :				
Well Name Bell Lake 24 Fed 4H	Type : Main well		UWI :	Plan : Working Plan
	Rig Height Drill Floor : 25.00 US ft		Comment :	
	Relative to Mean Sea Level: 3579.00 US ft			
	Closure Distance : 4915.38 US ft		Closure Azimuth : 344.843°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az : 355.82°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48321.0nT	Dec : 7.38°	Dip : 60.07° Date : 25/Mar/2014

Collision / Uncertainty Analysis				
Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Bell Lake 24 Fed 4H (p)	0.00	15873.86	100.00	2
Secondary Well Names				
Bell Lake 24 Fed 3H (s)				

Anti-Collision Report Terminology				
S.Minor, S.Major :Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.				
PHI :Angle between high-side vector and semi-minor axis				
TVD Spread :Total TVD range of the ellipsoid of uncertainty at the current location				
ES :Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr				
T.Face to Sec :Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells				

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

SD Anti-Collision Report

Anti-Collision Proximity Summary (TVD Relative to)

SP	Secondary Well Name	PM MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
	Bell Lake 24 Fed 3H (s)	4312.50	4312.64	4312.50	66.05	46.85	3.44	

Secondary Well: Bell Lake 24 Fed 3H (s) (TVD Relative to Drill Floor (Primary); All Azimuth Relative to GRID NORTH)								
PM MD (US ft)	TVD (US ft)	Sec MD (US ft)	Trace to Sec (°)	S-Major (US ft)	S-Minor (US ft)	CC (US ft)	ES (US ft)	SF
0.00	0.00	1.00	89.55	0.01	0.01	49.93	49.16	64.78
100.00	99.87	100.87	88.97	0.13	0.13	50.06	49.06	49.74
200.00	199.75	200.76	87.53	0.30	0.30	50.46	49.07	36.18
300.00	299.72	300.74	86.24	0.50	0.50	51.01	49.19	28.04
400.00	399.69	400.72	85.08	0.70	0.70	51.57	49.33	22.98
500.00	499.68	500.71	84.17	0.91	0.91	52.18	49.51	19.49
600.00	599.73	600.77	82.88	1.12	1.12	52.75	49.64	16.93
700.00	699.72	700.76	81.76	1.33	1.33	53.27	49.72	15.01
800.00	799.76	800.81	80.70	1.54	1.53	53.76	49.78	13.50
900.00	899.84	900.90	79.82	1.75	1.74	54.12	49.70	12.25
1000.00	999.60	1000.66	79.54	1.96	1.95	54.68	49.83	11.28
1100.00	1099.79	1100.85	79.54	2.17	2.16	55.17	49.89	10.46
1200.00	1199.64	1200.71	79.69	2.38	2.37	55.75	50.04	9.76
1300.00	1299.80	1300.86	80.23	2.59	2.58	56.19	50.04	9.14
1400.00	1399.74	1400.81	80.86	2.79	2.79	56.62	50.04	8.61
1500.00	1499.81	1500.88	81.12	3.00	2.99	57.04	50.03	8.13
1600.00	1599.84	1600.91	81.85	3.21	3.21	57.29	49.84	7.69
1700.00	1699.83	1700.90	82.61	3.42	3.42	57.63	49.75	7.32
1800.00	1799.93	1801.00	83.14	3.63	3.63	57.83	49.52	6.96
1900.00	1899.73	1900.81	83.82	3.84	3.84	58.03	49.29	6.64
2000.00	1999.79	2000.87	84.26	4.05	4.05	58.58	49.41	6.39
2100.00	2100.06	2101.14	84.81	4.26	4.26	58.70	49.11	6.12
2200.00	2199.92	2201.01	85.54	4.47	4.46	58.64	48.60	5.84
2300.00	2299.85	2300.94	85.94	4.68	4.67	58.87	48.39	5.62
2400.00	2399.99	2401.08	86.09	4.88	4.88	59.02	48.11	5.41
2500.00	2499.97	2501.06	86.31	5.09	5.09	59.05	47.70	5.21
2600.00	2600.10	2601.19	86.53	5.30	5.30	58.98	47.20	5.01
2700.00	2700.06	2701.15	86.93	5.51	5.51	58.84	46.64	4.82
2800.00	2800.02	2801.11	87.11	5.72	5.72	58.78	46.14	4.65
2900.00	2900.01	2901.10	87.45	5.93	5.93	58.73	45.65	4.49
3000.00	2999.83	3000.92	88.00	6.14	6.14	58.83	45.31	4.35
3100.00	3099.68	3100.77	88.52	6.35	6.35	59.35	45.40	4.26
3200.00	3199.76	3200.86	89.10	6.56	6.56	59.75	45.36	4.15
3300.00	3299.66	3300.76	89.58	6.77	6.77	60.26	45.43	4.06
3400.00	3399.68	3400.79	90.02	6.98	6.98	60.83	45.57	3.99
3500.00	3499.69	3500.79	90.71	7.19	7.19	61.31	45.63	3.91
3600.00	3599.62	3600.73	91.29	7.40	7.40	61.88	45.75	3.84
3700.00	3699.60	3700.72	91.97	7.61	7.61	62.52	45.96	3.77
3800.00	3799.65	3800.77	92.64	7.82	7.82	63.13	46.14	3.72
3900.00	3899.67	3900.79	93.14	8.03	8.03	63.66	46.25	3.66
4000.00	3999.66	4000.79	93.55	8.24	8.23	64.18	46.36	3.60
4100.00	4099.80	4100.93	94.13	8.45	8.44	64.61	46.34	3.54
4200.00	4199.74	4200.87	94.89	8.66	8.65	64.96	46.26	3.47
4300.00	4299.06	4300.20	95.57	8.87	8.86	65.87	46.72	3.44
4400.00	4398.54	4399.70	96.32	9.08	9.07	67.67	48.09	3.46
4500.00	4498.20	4499.39	97.31	9.29	9.28	70.03	50.01	3.50
4600.00	4597.78	4599.03	98.62	9.50	9.49	72.85	52.38	3.56
4700.00	4697.45	4698.77	100.18	9.72	9.70	76.08	55.17	3.64
4800.00	4797.31	4798.71	101.67	9.90	9.88	79.46	58.15	3.73
4900.00	4897.29	4898.76	102.96	9.97	9.95	82.82	61.25	3.84
5000.00	4997.39	4998.92	103.97	9.98	9.96	85.94	64.21	3.95
5100.00	5098.46	5100.04	105.12	9.99	9.97	88.42	66.45	4.02

SD Anti-Collision Report

Secondary Well: Bell Lake 20 Fed 311 (S) (TVD Relative to Drill Floor (Primary)) ; All Azimuth Relative to GRID NORTH									
PRI MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
5200.00	5198.90	5200.52	106.74	10.01	9.99	89.87	67.62	4.04	
5300.00	5299.38	5301.03	108.20	10.03	10.01	90.82	68.30	4.03	
5400.00	5399.60	5401.27	109.40	10.06	10.04	91.38	68.60	4.01	
5500.00	5499.74	5501.43	212.64	10.09	10.07	92.25	69.27	4.01	
5600.00	5599.48	5601.19	212.60	10.12	10.10	95.91	72.70	4.13	
5700.00	5699.30	5701.04	211.77	10.16	10.14	102.53	79.07	4.37	
5800.00	5798.94	5800.70	210.21	10.20	10.18	112.08	88.37	4.73	
5900.00	5898.38	5900.18	208.09	10.25	10.23	124.48	100.54	5.20	
6000.00	5997.22	5999.05	205.74	10.30	10.28	139.36	115.15	5.76	
6100.00	6096.00	6097.84	203.71	10.36	10.33	154.65	130.23	6.33	
6200.00	6194.93	6196.80	202.00	10.42	10.39	169.96	145.25	6.88	
6300.00	6293.82	6295.71	200.58	10.48	10.46	185.26	160.31	7.42	
6400.00	6391.77	6393.68	199.40	10.55	10.52	200.72	175.51	7.96	
6500.00	6489.61	6491.55	198.46	10.62	10.58	216.74	191.26	8.50	
6600.00	6588.86	6590.82	197.63	10.69	10.65	232.90	207.15	9.04	
6700.00	6686.72	6688.71	196.99	10.76	10.72	248.93	222.92	9.57	
6800.00	6784.88	6786.93	196.59	10.84	10.79	265.38	239.09	10.09	
6900.00	6883.47	6885.57	196.27	10.92	10.87	281.86	255.26	10.59	
7000.00	6982.79	6984.96	196.02	11.01	10.95	298.23	271.32	11.08	
7100.00	7082.06	7084.29	195.81	11.11	11.04	314.36	287.13	11.55	
7200.00	7181.19	7183.49	195.63	11.21	11.14	330.31	302.78	12.00	
7300.00	7279.67	7282.05	195.47	11.31	11.23	346.20	318.37	12.44	
7400.00	7375.18	7377.63	195.35	11.40	11.32	362.58	334.44	12.88	
7500.00	7474.14	7476.66	195.25	11.51	11.42	379.31	350.83	13.32	
7600.00	7572.69	7575.29	195.16	11.62	11.52	395.97	367.15	13.74	
7700.00	7670.87	7673.54	195.06	11.73	11.63	412.68	383.52	14.15	
7800.00	7769.33	7772.07	194.95	11.85	11.74	429.45	399.95	14.56	
7900.00	7868.23	7871.03	194.83	11.97	11.85	446.18	416.33	14.95	
8000.00	7967.02	7969.87	194.68	12.09	11.97	462.80	432.61	15.33	
8100.00	8065.00	8067.91	194.54	12.21	12.08	479.51	448.97	15.70	
8200.00	8163.24	8166.19	194.40	12.33	12.20	496.28	465.40	16.07	
8300.00	8262.04	8265.05	194.30	12.46	12.31	513.11	481.88	16.43	
8400.00	8361.85	8364.92	194.20	12.59	12.44	529.74	498.15	16.77	
8500.00	8460.73	8463.85	194.11	12.72	12.57	546.20	514.26	17.10	
8600.00	8559.57	8562.76	194.03	12.85	12.70	562.67	530.37	17.42	
8700.00	8657.53	8660.77	193.94	12.99	12.84	579.09	546.44	17.73	
8800.00	8754.85	8758.14	193.85	13.12	12.98	595.73	562.73	18.05	
8900.00	8854.38	8857.72	193.75	13.26	13.12	612.44	579.07	18.35	
9000.00	8953.24	8956.62	193.64	13.40	13.26	628.96	595.20	18.63	
9100.00	9055.24	9058.65	193.46	13.55	13.42	645.30	611.15	18.89	
9200.00	9156.38	9159.81	193.25	13.70	13.57	661.11	626.55	19.13	
9300.00	9261.94	9265.39	192.99	13.86	13.73	676.29	641.32	19.34	
9400.00	9361.18	9364.67	192.77	14.00	13.86	690.91	655.56	19.54	
9500.00	9456.85	9460.38	192.60	14.14	13.97	705.74	670.03	19.76	
9600.00	9551.48	9555.03	192.46	14.27	14.12	721.20	685.17	20.02	
9700.00	9662.91	9666.53	192.33	14.44	14.28	735.88	699.39	20.16	
9800.00	9766.26	9769.98	192.26	14.61	14.44	749.45	712.55	20.31	
9900.00	9863.22	9867.04	192.19	14.77	14.61	762.83	725.50	20.44	
10000.00	9959.67	9963.55	192.04	14.91	14.76	776.78	739.07	20.60	
10100.00	10053.24	10057.18	191.93	15.06	14.90	790.75	752.68	20.77	
10200.00	10134.35	10138.32	191.86	15.19	14.98	806.41	768.01	21.00	
10300.00	10215.39	10219.39	191.78	15.30	15.16	824.47	785.78	21.31	
10400.00	10322.06	10326.09	191.68	15.46	15.33	842.64	803.51	21.53	
10500.00	10418.33	10422.38	191.57	15.62	15.47	860.88	821.34	21.77	
10600.00	10537.45	10541.52	191.33	15.81	15.67	878.16	838.16	21.96	
10700.00	10610.68	10615.05	152.72	15.94	15.81	894.92	854.62	22.21	
10800.00	10669.18	10674.64	119.15	16.01	15.91	916.27	875.76	22.61	
10900.00	10722.60	10729.72	106.06	16.07	16.00	941.67	900.89	23.09	

5D Anti-Collision Report

Secondary Well: Bell Lake 20 Fed SH (s) (TVD Relative to Drill Floor (Primary)) ; All Azimuth Relative to GRID (North)									
Prim MD (US ft)	TVD (US ft)	Sec MD (US ft)	T Face to Sec (°)	S-Major (US ft)	S-Minor (US ft)	CC (US ft)	ES (US ft)	SP	Risk
11000.00	10792.42	10802.80	99.40	16.20	16.11	969.12	928.13	23.65	
11100.00	10854.12	10870.80	95.00	16.40	16.18	997.98	956.75	24.21	
11200.00	10962.28	11010.21	93.34	16.88	16.31	1024.92	983.43	24.70	
11300.00	11056.76	11245.00	92.03	17.65	16.83	1040.55	998.13	24.53	
11400.00	11056.76	11245.00	90.44	17.65	16.83	1051.90	1009.30	24.69	
11500.00	11056.76	11245.00	90.37	17.65	16.83	1070.79	1028.08	25.07	
11600.00	11056.76	11245.00	90.37	17.65	16.83	1098.49	1055.61	25.62	
11700.00	11056.76	11245.00	90.37	17.65	16.83	1134.36	1091.34	26.37	
11800.00	11056.76	11245.00	90.37	17.65	16.83	1177.65	1134.44	27.25	
11900.00	11056.76	11245.00	90.37	17.65	16.83	1227.58	1184.29	28.36	
12000.00	11056.76	11245.00	90.37	17.65	16.83	1283.37	1239.96	29.56	
12100.00	11056.76	11245.00	90.37	17.65	16.83	1344.30	1300.80	30.91	
12200.00	11056.76	11245.00	90.37	17.65	16.83	1409.69	1366.18	32.40	
12300.00	11056.76	11245.00	90.37	17.65	16.83	1478.96	1435.38	33.94	
12400.00	11056.76	11245.00	90.37	17.65	16.83	1551.58	1507.95	35.56	
12500.00	11056.76	11245.00	90.37	17.65	16.83	1627.11	1583.47	37.28	
12600.00	11056.76	11245.00	90.37	17.65	16.83	1705.17	1661.53	39.08	
12700.00	11056.76	11245.00	90.37	17.65	16.83	1785.41	1741.76	40.90	
12800.00	11056.76	11245.00	90.37	17.65	16.83	1867.56	1823.87	42.75	
12900.00	11056.76	11245.00	90.37	17.65	16.83	1951.38	1907.66	44.64	
13000.00	11056.76	11245.00	90.37	17.65	16.83	2036.65	1992.93	46.58	
13100.00	11056.76	11245.00	90.37	17.65	16.83	2123.22	2079.48	48.55	
13200.00	11056.76	11245.00	90.37	17.65	16.83	2210.91	2167.17	50.55	
13300.00	11056.76	11245.00	90.37	17.65	16.83	2299.61	2255.87	52.57	
13400.00	11056.76	11245.00	90.37	17.65	16.83	2389.21	2345.43	54.57	
13500.00	11056.76	11245.00	90.37	17.65	16.83	2479.60	2435.64	56.40	
13600.00	11056.76	11245.00	90.37	17.65	16.83	2570.70	2526.74	58.48	
13700.00	11056.76	11245.00	90.37	17.65	16.83	2662.44	2618.46	60.54	
13800.00	11056.76	11245.00	90.37	17.65	16.83	2754.76	2710.75	62.61	
13900.00	11056.76	11245.00	90.37	17.65	16.83	2847.59	2803.57	64.69	
14000.00	11056.76	11245.00	90.37	17.65	16.83	2940.89	2896.85	66.78	
14100.00	11056.76	11245.00	90.37	17.65	16.83	3034.63	2990.57	68.88	
14200.00	11056.76	11245.00	90.37	17.65	16.83	3128.74	3084.67	70.98	
14300.00	11056.76	11245.00	90.37	17.65	16.83	3223.22	3179.12	73.09	
14400.00	11056.76	11245.00	90.37	17.65	16.83	3318.02	3273.89	75.20	
14500.00	11056.76	11245.00	90.37	17.65	16.83	3413.11	3368.96	77.32	
14600.00	11056.76	11245.00	90.37	17.65	16.83	3508.48	3464.31	79.43	
14700.00	11056.76	11245.00	90.37	17.65	16.83	3604.09	3559.90	81.56	
14800.00	11056.76	11245.00	90.37	17.65	16.83	3699.94	3655.73	83.68	
14900.00	11056.76	11245.00	90.37	17.65	16.83	3796.01	3751.76	85.79	
15000.00	11056.76	11245.00	90.37	17.65	16.83	3892.27	3847.98	87.87	
15100.00	11056.76	11245.00	90.37	17.65	16.83	3988.72	3944.38	89.96	
15200.00	11056.76	11245.00	90.37	17.65	16.83	4085.33	4040.95	92.04	
15300.00	11056.76	11245.00	90.37	17.65	16.83	4182.11	4137.68	94.13	
15400.00	11056.76	11245.00	90.37	17.65	16.83	4279.03	4234.56	96.21	
15500.00	11056.76	11245.00	90.37	17.65	16.83	4376.10	4331.58	98.30	
15600.00	11056.76	11245.00	90.37	17.65	16.83	4473.29	4428.72	100.38	
15700.00	11056.76	11245.00	90.37	17.65	16.83	4570.60	4525.99	102.46	
15800.00	11056.76	11245.00	90.37	17.65	16.83	4668.03	4623.37	104.53	
15873.86	11056.76	11245.00	90.37	17.65	16.83	4740.06	4695.37	106.06	

**Weatherford****Weatherford Drilling Services**

GeoDec v5.03

Report Date: January 31, 2014

Job Number: _____

Customer: Devon Energy

Well Name: Bell Lake 24 Fed 4H

API Number: _____

Rig Name: _____

Location: Lea County, NM

Block: _____

Engineer: RWJ

US State Plane 1983

Geodetic Latitude / Longitude

System: New Mexico Eastern Zone

System: Latitude / Longitude

Projection: Transverse Mercator/Gauss Kruger Projection: Geodetic Latitude and Longitude

Datum: North American Datum 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Ellipsoid: GRS 1980

North/South 435923.390 USFT

Latitude 32.1964546 DEG

East/West 760016.110 USFT

Longitude -103.6263876 DEG

Grid Convergence: 38°

Total Correction: +7.00°

Geodetic Location WGS84

Elevation = 0.0 Meters

Latitude = 32.19645° N 32° 11 min 47.237 sec

Longitude = 103.62639° W 103° 37 min 34.995 sec

Magnetic Declination = 7.38° [True North Offset]

Local Gravity = .9988 g CheckSum = 6487

Local Field Strength = 48321 nT Magnetic Vector X = 23911 nT

Magnetic Dip = 60.07° Magnetic Vector Y = 3098 nT

Magnetic Model = bggm2013 Magnetic Vector Z = 41876 nT

Spud Date = Mar 25, 2014 Magnetic Vector H = 24111 nT

Signed: _____

Date: _____

Conditions of Approval

1. The minimum required fill of cement behind the 7 X 5-1/2 inch production casing is:

- ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.