

NM OIL CONSERVATION
ARTESIA DISTRICT

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APR 27 2015

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

RECEIVED

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5. Lease Serial No. BHL: NMNM0503	
b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resrv., Other: _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Devon Energy Production Company, L.P.		7. Unit or CA Agreement Name and No. 891005247X	
3. Address 333 West Sheridan Ave, Oklahoma City, OK 73102		8. Lease Name and Well No. Cotton Draw Unit 172H	
3a. Phone No. (include area code) 405-228-4248		9. AFI Well No. 30-015-42426	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 195' FSL & 1345' FEL Unit O, Sec 1, T25S, R31E At top prod. interval reported below At total depth 333' FNL & 1974' FEL Lot 2, Sec 1, T25S, R31E		10. Field and Pool or Exploratory Cotton Draw; Delaware	
		11. Sec. T., R., M., on Block and Survey or Area Sec 1, T25S, R31E	
		12. County or Parish Eddy	13. State NM
14. Date Spudded 10/3/14	15. Date T.D. Reached 10/20/14	16. Date Completed 3/9/15 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.	
17. Elevations (DF, RKB, RT, GL)* GL: 3445.4			
18. Total Depth: MD 12827 TVD 8150.86	19. Plug Back T.D.: MD 12779.7 TVD	20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL / Gamma Ray / CCL		22. Was well cored? <input type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit copy)	

23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8" H-40	48#	0	800		735 sx CIC		0	252 sx
12-1/4"	9-5/8" J-55	40#	0	4440		1680 sx CIC		0	70 bbls
8-3/4"	5-1/2" HCP-110	17#	0	12827	DV @ 6013.8	2550 sx Cement		6011	255 sx

24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2-7/8"	7621.3								

25. Producing Intervals				26. Perforation Record			
Formation	Top	Bottom		Perforated Interval	Size	No. Holes	Perf. Status
A) Lower Brushy Canyon	8354	12723		8354 - 12723		192	open
B)							
C)							
D)							



27. Acid, Fracture, Treatment, Cement Squeeze, etc.		Amount and Type of Material
Depth Interval 8354 - 12723		48,000 gals 0.1%-7.5% HCl Acid, 1,131,580# 100 Mesh White, 481,110# 40/70 Super LC, 1,128,380# 40/70 White

28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
3/9/15	4/14/15	24	→	607	809	1920			Pump
Choke Size	Thg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
	450psi	400psi	→				1332.784		

28a. Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Thg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

1

Date First Produced	Test Date	Hours Tested	Test Production 	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Fwlg. SI	Csg. Press.	24 Hr. Rate 	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
Lower Brushy	8143			Lower Brushy Canyon	8143

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Lucretia Morris

Title Regulatory Compliance Analyst

Signature

Date 4/23/2015

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 3)

(Form 3160-4, page 2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
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. BHL: NMNM0503

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

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

891005247X

8. Well Name and No.
Cotton Draw Unit 172H

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Devon Energy Production Company, L.P.

9. API Well No.

30-015-42426

3a. Address

333 West Sheridan, Oklahoma City, OK 73102

3b. Phone No. (include area code)

405-228-4248

10. Field and Pool or Exploratory Area

Cotton Draw; Delaware

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

195' FSL & 1345' FEL Unit O, Sec 1, T25S, R31E

333' FNL & 1974' FEL Lot 2, Sec 1, T25S, R31E

PP: 314' FSL & 1627' FEL

11. Country or Parish, State

Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Completion Report</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

1/22/15-3/9/15: MIRU WL & PT. TIH & ran CBL, found TOC @ 2342'. TIH w/pump through frac plug and guns. Perf Lower Brushy Canyon, 8354'-12723', total 192 holes. Frac'd 8354'-12723' in 16 stages. Frac totals 48,000 gals 0.1%-7.5% HCl, 1,131,580# 100 Mesh White sand, 481,110# 40/70 Super LC and 1,128,380# 40/70 White. ND frac, MIRU PU, NU BOP, DO plugs. CHC, FWB, ND BOP. RIH w/215 jts 2-7/8" L-80 tbg, set @ 7621.3'. RIH w/ ESP, cont flowing ESP. TOP.

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 27 2015

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

Name (Printed/Typed)

Lucretia Morris

Title Regulatory Compliance Analyst

RECEIVED

Signature

Lucretia Morris

Date 4/23/2015

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 to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Devon Energy Production Company, L.P. 333 West Sheridan, Oklahoma City, OK 73102		² OGRID Number 6137
		³ Reason for Filing Code/ Effective Date NW / 3/9/15
⁴ API Number 30-015-42426	⁵ Pool Name Cotton Draw; Delaware	⁶ Pool Code 96757
⁷ Property Code 300635	⁸ Property Name Cotton Draw Unit	⁹ Well Number 172H

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	1	25S	31E		195	South	1345	East	Eddy

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	1	25S	31E		333	North	1974	East	Eddy
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 3/9/15	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
020445	Plains Marketing P.O. Box 4648 Houston, TX 77210	Oil
036785	DCP Midstream P.O. Box 50020 Midland, TX 79710-0020	Gas
	NM OIL CONSERVATION ARTESIA DISTRICT	
	APR 27 2015	

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IV. Well Completion Data

²¹ Spud Date 10/3/14	²² Ready Date 3/9/15	²³ TD 12827	²⁴ PBDT 12779.7	²⁵ Perforations 8354 - 12723	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17-1/2"	13-3/8"	800	735 sx CIC; Circ 252 sx		
12-1/4"	9-5/8"	4440	1680 sx CIC; Circ 70 bbls		
8-3/4"	5-1/2"	12827	2550 sx Cement; Circ 255 sx		
	Tubing: 2-7/8"	7621.3			

V. Well Test Data

³¹ Date New Oil 4/14/15	³² Gas Delivery Date 4/14/15	³³ Test Date 4/14/15	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure 450 psi	³⁶ Csg. Pressure 400 psi
³⁷ Choke Size	³⁸ Oil 607 bbl	³⁹ Water 1920 bbl	⁴⁰ Gas 809 mcf		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Lucretia Morris</i>			OIL CONSERVATION DIVISION		
Printed name: Lucretia Morris			Approved by:		
Title: Regulatory Compliance Analyst			Title:		
E-mail Address: lucretia.morris@dvn.com			Approval Date:		
Date: 4/23/2015		Phone: 405-532-3303			

DISTRICT I
1623 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-42426	Pool Code 96757	Pool Name Cotton Draw; Delaware, So.
Property Code 300635	Property Name COTTON DRAW UNIT	Well Number 172H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, LP.	Elevation 3445.4'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	1	25 S	31 E		195	SOUTH	1345	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	1	25 S	31 E		333	NORTH	1974	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidated Code	Order No.
160.15			

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.

<p>NW COR SEC 1 NMSP-E (NAD 83) Y = 424872.7' N X = 724904.5' E LAT. = N32° 09' 59.98" LONG. = W103° 44' 24.32"</p>	<p>COTTON DRAW UNIT 172H BHL NMSP-E (NAD 83) Y = 424543.0' N X = 728226.2' E LAT. = N32° 09' 56.54" LONG. = W103° 43' 45.69"</p>		<p>NE COR SEC 1 NMSP-E (NAD 83) Y = 424873.8' N X = 730204.8' E LAT. = N32° 09' 59.70" LONG. = W103° 43' 22.65"</p>	<p>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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Lucretia Morris</i> 1/9/2015 Signature Date</p> <p>Lucretia Morris, Regulatory Analyst Print Name</p> <p>Lucretia.Morris@dvn.com E-mail Address</p>
<p>SW COR SEC 1 NMSP-E (NAD 83) Y = 419571.7' N X = 724928.4' E LAT. = N32° 09' 07.53" LONG. = W103° 44' 24.38"</p>	<p>COTTON DRAW UNIT 172H SHL NMSP-E (NAD 83) Y = 419784.1' N X = 728882.8' E LAT. = N32° 09' 09.41" LONG. = W103° 43' 38.37"</p>		<p>SE COR SEC 1 NMSP-E (NAD 83) Y = 419599.1' N X = 730228.6' E LAT. = N32° 09' 07.50" LONG. = W103° 43' 22.72"</p>	<p>SURVEYORS 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.</p> <p>Sept. 2012 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p><i>James E. Tompkins</i> JAMES E. TOMPKINS NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 14729</p> <p>Job No.: WTC48670 JAMES E. TOMPKINS 14729 Certificate Number</p>

PP: 314' FSL & 1627' FEL, Sec 1, T25S, R31E

Project Area:

Producing Area:



October 28, 2014

Devon Energy
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010


Attn: David Cook

Re: **Cotton Draw Unit 172H**

Please find enclosed a copy of the survey from 0.00' to 4368.17' ran on the above referenced well.

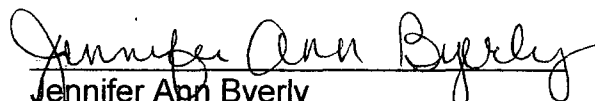
If I can be of any further service please do not hesitate to call me at 800-606-4976.

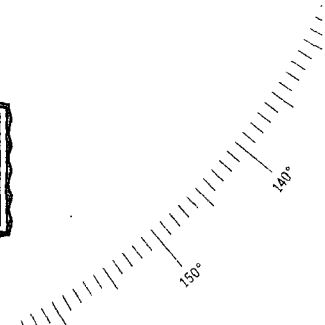
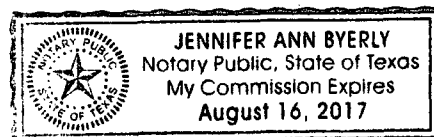
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 28 day of October, A.D., 2014, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: Devon Energy
Lease/Well: Cotton Draw Unit/172H

Rig Name: Cactus #126
State/County: New Mexico/Eddy
Latitude: 32.15, Longitude: -103.73
GRID North is 0.32 Degrees East of True North
VS-Azi: 0.00 Degrees



NM OIL CONSERVATION
ARTESIA DISTRICT
APR 27 2015
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Depth Reference : 25 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 10/28/2014 / 10:33

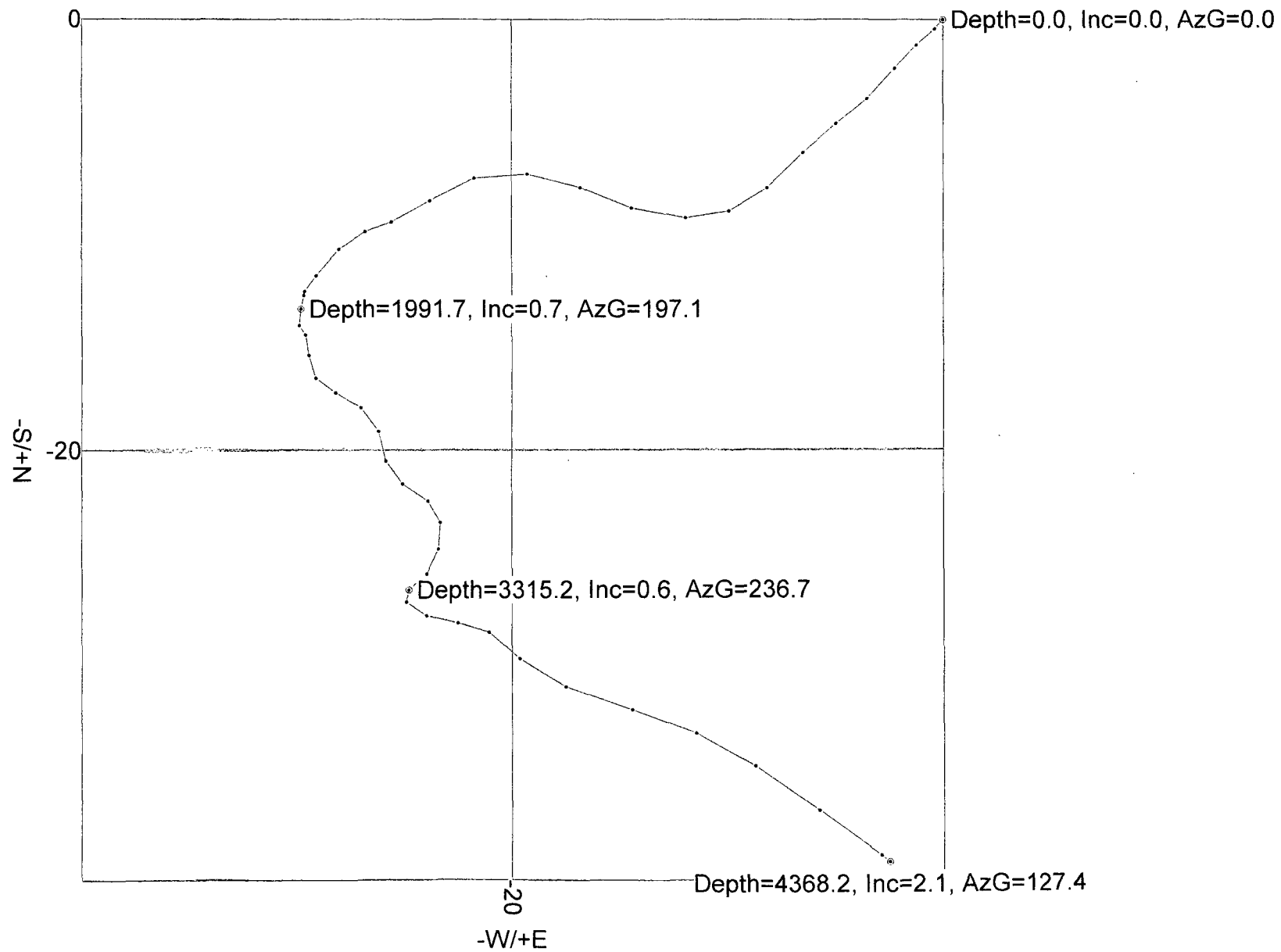
VES Survey International
West Texas
(432) 563-5444
Surveyor: Neil Bates
Cotton Draw Unit 172H / API 30-015-42426

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.87	0.67	221.50	100.87	-0.44	-0.39	-0.44	0.59	221.50	0.66
195.41	0.72	233.65	195.40	-1.21	-1.23	-1.21	1.73	225.64	0.16
289.95	1.08	217.01	289.93	-2.27	-2.25	-2.27	3.20	224.71	0.47
384.49	1.24	225.11	384.45	-3.71	-3.51	-3.71	5.11	223.45	0.24
479.03	1.02	239.16	478.97	-4.86	-4.96	-4.86	6.95	225.58	0.37
573.57	1.47	221.69	573.49	-6.20	-6.49	-6.20	8.98	226.31	0.62
668.11	1.38	230.38	668.00	-7.84	-8.18	-7.84	11.33	226.23	0.25
762.65	1.14	248.97	762.52	-8.90	-9.93	-8.90	13.34	228.14	0.50
857.19	1.38	271.19	857.04	-9.21	-11.95	-9.21	15.09	232.35	0.57
951.73	1.74	287.41	951.54	-8.76	-14.45	-8.76	16.90	238.77	0.60
1046.27	1.34	298.31	1046.05	-7.81	-16.80	-7.81	18.52	245.07	0.52
1140.81	1.81	273.65	1140.55	-7.18	-19.27	-7.18	20.56	249.55	0.86
1235.35	1.22	253.29	1235.06	-7.38	-21.72	-7.38	22.94	251.24	0.84
1329.89	1.62	236.15	1329.57	-8.41	-23.79	-8.41	25.23	250.53	0.61
1424.43	0.87	249.32	1424.09	-9.41	-25.57	-9.41	27.25	249.80	0.84
1518.97	0.69	250.53	1518.62	-9.85	-26.78	-9.85	28.54	249.80	0.19
1613.51	1.10	226.62	1613.15	-10.66	-27.98	-10.66	29.94	249.13	0.57
1708.05	0.91	214.66	1707.67	-11.90	-29.06	-11.90	31.41	247.73	0.30

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1802.59	0.18	216.93	1802.21	-12.64	-29.58	-12.64	32.16	246.87	0.77
1897.13	0.10	144.99	1896.75	-12.82	-29.62	-12.82	32.28	246.59	0.19
1991.67	0.72	197.09	1991.28	-13.46	-29.75	-13.46	32.65	245.66	0.70
2086.21	0.26	151.93	2085.82	-14.22	-29.82	-14.22	33.04	244.51	0.60
2180.75	0.38	143.54	2180.36	-14.66	-29.53	-14.66	32.97	243.60	0.13
2275.29	0.84	183.85	2274.89	-15.60	-29.40	-15.60	33.28	242.05	0.64
2369.83	0.63	134.98	2369.43	-16.66	-29.08	-16.66	33.51	240.20	0.67
2464.37	0.77	119.60	2463.96	-17.33	-28.16	-17.33	33.07	238.38	0.25
2558.91	0.88	122.65	2558.49	-18.04	-26.99	-18.04	32.47	236.25	0.13
2653.45	0.89	163.81	2653.02	-19.13	-26.18	-19.13	32.43	233.84	0.66
2747.99	0.83	168.36	2747.55	-20.51	-25.84	-20.51	32.99	231.56	0.09
2842.53	0.91	121.41	2842.08	-21.57	-25.06	-21.57	33.06	229.28	0.74
2937.07	0.81	127.49	2936.61	-22.36	-23.89	-22.36	32.72	226.88	0.15
3031.61	0.71	175.79	3031.14	-23.35	-23.32	-23.35	33.00	224.96	0.66
3126.15	0.81	190.15	3125.67	-24.59	-23.39	-24.59	33.94	223.57	0.22
3220.69	0.81	222.23	3220.20	-25.74	-23.96	-25.74	35.16	222.95	0.47
3315.23	0.55	236.69	3314.74	-26.49	-24.79	-26.49	36.28	223.10	0.32
3409.77	0.49	136.79	3409.28	-27.03	-24.89	-27.03	36.75	222.64	0.85
3504.31	0.90	117.50	3503.81	-27.67	-23.96	-27.67	36.60	220.89	0.50
3598.85	0.97	89.98	3598.34	-28.01	-22.50	-28.01	35.93	218.76	0.48
3693.39	0.93	123.60	3692.86	-28.44	-21.06	-28.44	35.39	216.52	0.58
3787.93	1.37	136.34	3787.38	-29.68	-19.64	-29.68	35.59	213.50	0.54
3882.47	1.78	109.66	3881.89	-30.99	-17.48	-30.99	35.58	209.43	0.88
3977.01	2.15	109.52	3976.37	-32.07	-14.42	-32.07	35.17	204.21	0.39
4071.55	1.65	110.70	4070.86	-33.15	-11.48	-33.15	35.08	199.10	0.54
4166.09	2.21	125.93	4165.35	-34.70	-8.74	-34.70	35.78	194.13	0.80
4260.63	2.18	123.51	4259.82	-36.75	-5.77	-36.75	37.20	188.92	0.10
4355.17	2.14	128.75	4354.29	-38.85	-2.89	-38.85	38.96	184.25	0.21
4368.17	2.13	127.42	4367.28	-39.15	-2.51	-39.15	39.23	183.67	0.39



VES Survey International
West Texas
(432) 563-5444
Surveyor: Neil Bates
Cotton Draw Unit 172H / API 30-015-42426





COTTON DRAW UNIT 172H

DELAWARE BASIN UNRESTRICTED

Directional Survey

Sub-Division	County	Field Name	Region	State/Province
DELAWARE BASIN	BOY	PADUCA	DELAWARE BASIN WEST	WV
Surface Legal Location	API No.	Latitude (°)	Longitude (°)	Ground Elev. (M)
Sec. 1 T25S R31E	001154226	32° 9' 9.41" N	103° 43' 38.37" W	3,445.40
				Orig. KB Elev. (ft)
				3,470.40
				Tubing Head Elevation (ft)

Wellbores
Wellbore Name
Parent Wellbore
SAP Well ID
37143
Vertical Section Direction (°)

Kick Offs & Key Depths
Date
Type
Top Depth (ftKB)

Actual Deviation Survey	Definitive?	Proposed?	Proposed Deviation Survey
GYRO/MWD Proposed? No	Yes	No	

Deviation Survey					
Date		Description			
10/10/2014		GYRO/MWD			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)
0.00	0.00	0.00	0.00	0.00	0.00

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (7/100ft)	Survey Tool	Survey Company
10/3/2014	100.87	0.67	221.50	100.87	-0.38	-0.44	-0.39	0.66	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	195.41	0.72	233.65	195.40	-1.03	-1.21	-1.24	0.16	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	289.95	1.08	217.01	289.93	-1.94	-2.27	-2.25	0.47	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	384.49	1.24	225.11	384.45	-3.18	-3.70	-3.51	0.24	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	479.03	1.02	239.16	478.97	-4.13	-4.86	-4.96	0.37	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	573.57	1.47	221.69	573.49	-5.24	-6.19	-6.49	0.62	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	668.11	1.38	230.38	668.00	-6.62	-7.83	-8.17	0.25	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	762.65	1.14	248.97	762.52	-7.43	-8.89	-9.93	0.50	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	857.19	1.38	271.19	857.04	-7.46	-9.20	-11.94	0.57	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	951.73	1.74	287.41	951.54	-6.67	-8.75	-14.45	0.60	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,046.27	1.34	298.31	1,046.05	-5.40	-7.80	-16.79	0.52	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,140.81	1.81	273.65	1,140.55	-4.44	-7.18	-19.26	0.86	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,235.35	1.22	253.29	1,235.06	-4.30	-7.37	-21.71	0.84	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,329.89	1.62	236.15	1,329.57	-5.03	-8.41	-23.78	0.61	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,424.43	0.87	249.32	1,424.09	-5.78	-9.40	-25.56	0.84	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,518.97	0.69	250.53	1,518.62	-6.05	-9.85	-26.77	0.19	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,613.51	1.10	226.62	1,613.15	-6.69	-10.66	-27.97	0.58	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,708.05	0.91	214.66	1,707.67	-7.77	-11.90	-29.06	0.30	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,802.59	0.18	216.93	1,802.21	-8.42	-12.64	-29.57	0.77	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,897.13	0.10	144.99	1,896.75	-8.60	-12.82	-29.61	0.19	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	1,991.67	0.72	197.09	1,991.28	-9.21	-13.46	-29.74	0.70	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,086.21	0.26	151.93	2,085.82	-9.95	-14.22	-29.81	0.60	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,180.75	0.38	143.54	2,180.36	-10.43	-14.66	-29.53	0.14	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,275.29	0.84	183.85	2,274.89	-11.38	-15.60	-29.39	0.64	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,369.83	0.63	134.98	2,369.43	-12.48	-16.66	-29.07	0.67	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,464.37	0.77	119.60	2,463.96	-13.28	-17.34	-28.15	0.25	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,558.91	0.88	122.65	2,558.49	-14.14	-18.05	-26.98	0.13	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,653.45	0.89	163.81	2,653.02	-15.34	-19.14	-26.17	0.66	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,747.99	0.83	168.36	2,747.55	-16.75	-20.52	-25.82	0.10	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,842.53	0.91	121.41	2,842.08	-17.91	-21.58	-25.04	0.74	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	2,937.07	0.81	127.49	2,936.61	-18.86	-22.38	-23.87	0.14	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,031.61	0.71	175.79	3,031.14	-19.92	-23.37	-23.30	0.66	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,126.15	0.81	190.15	3,125.67	-21.14	-24.61	-23.38	0.23	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,220.69	0.81	222.23	3,220.20	-22.20	-25.76	-23.94	0.47	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,315.23	0.55	236.69	3,314.74	-22.82	-26.51	-24.77	0.33	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,409.77	0.49	136.79	3,409.28	-23.35	-27.05	-24.87	0.84	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,504.31	0.90	117.50	3,503.81	-24.11	-27.69	-23.94	0.49	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,598.85	0.97	89.98	3,598.34	-24.65	-28.03	-22.48	0.48	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,693.39	0.93	123.60	3,692.86	-25.27	-28.46	-21.04	0.58	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,787.93	1.37	136.34	3,787.38	-26.70	-29.70	-19.62	0.54	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,882.47	1.78	109.66	3,881.89	-28.30	-31.01	-17.46	0.88	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	3,977.01	2.15	109.52	3,976.37	-29.79	-32.10	-14.40	0.39	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	4,071.55	1.65	110.70	4,070.86	-31.27	-33.17	-11.46	0.53	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	4,166.09	2.21	125.93	4,165.35	-33.18	-34.72	-8.71	0.80	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	4,260.63	2.18	123.51	4,259.82	-35.64	-36.78	-5.73	0.10	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	4,355.17	2.14	128.75	4,354.29	-38.11	-38.88	-2.86	0.21	GYRO	VAUHG N ENERGY SERVICES
10/3/2014	4,368.17	2.13	127.42	4,367.28	-38.46	-39.18	-2.48	0.39	GYRO	VAUHG N ENERGY SERVICES



Directional Survey

Sub-Division	County	Field Name	Region	State/Province
DELAWARE BASIN	EDDY	PADUCA	DELAWARE BASIN WEST	NM
Surface Legal Location	APN	Latitude (°)	Longitude (°)	Ground Elev. (M)
Sec. 1 T25S R31E	201154226	32° 9' 9.41" N	103° 43' 38.37" W	3,445.40
				Orig. KB Elev. (ft)
				3,470.40
				Tubing Head Elevation (ft)

Survey Data

Date	MD (RKB)	Incl (°)	Azm (°)	TVD (RKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/3/2014	4,445.00	1.90	132.30	4,444.07	-40.46	-40.90	-0.40	0.37	MWD	LEAM DRILLING SYSTEMS
10/3/2014	4,540.00	2.10	157.40	4,539.01	-43.35	-43.57	-1.43	0.94	MWD	LEAM DRILLING SYSTEMS
10/3/2014	4,635.00	2.00	185.70	4,633.95	-46.65	-46.83	-1.94	1.06	MWD	LEAM DRILLING SYSTEMS
10/3/2014	4,730.00	2.50	207.70	4,728.88	-49.94	-50.31	-0.81	1.04	MWD	LEAM DRILLING SYSTEMS
10/3/2014	4,824.00	2.90	217.90	4,822.78	-53.26	-54.00	-1.60	0.66	MWD	VAUGHN ENERGY SERVICES
10/3/2014	4,919.00	3.20	239.80	4,917.64	-55.94	-57.23	-5.37	1.26	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,013.00	3.60	242.60	5,011.48	-57.92	-59.91	-10.26	0.46	GYRO	LEAM DRILLING SYSTEMS
10/3/2014	5,108.00	4.50	247.60	5,106.24	-59.84	-62.70	-16.35	1.02	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,203.00	5.20	248.10	5,200.90	-61.80	-65.73	-23.79	0.74	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,297.00	5.70	246.30	5,294.47	-64.10	-69.20	-32.02	0.56	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,391.00	6.20	244.60	5,387.97	-66.89	-73.25	-40.88	0.56	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,486.00	6.80	243.90	5,482.36	-70.18	-77.92	-50.57	0.64	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,580.00	7.00	246.20	5,575.68	-73.47	-82.68	-60.80	0.36	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,675.00	6.80	247.00	5,669.99	-76.51	-87.22	-71.28	0.23	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,769.00	6.60	247.40	5,763.35	-79.32	-91.47	-81.39	0.22	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,864.00	6.40	246.90	5,857.74	-82.09	-95.64	-91.30	0.22	MWD	LEAM DRILLING SYSTEMS
10/3/2014	5,958.00	6.40	247.00	5,951.15	-84.82	-99.75	-100.94	0.01	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,053.00	6.10	247.00	6,045.58	-87.50	-103.79	-110.46	0.32	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,148.00	5.50	248.80	6,140.10	-89.86	-107.40	-119.35	0.66	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,242.00	6.10	246.90	6,233.62	-92.19	-110.99	-128.14	0.67	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,336.00	5.90	246.90	6,327.10	-94.76	-114.85	-137.18	0.21	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,431.00	5.90	247.20	6,421.60	-97.29	-118.66	-146.17	0.03	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,524.00	6.00	247.00	6,514.10	-99.77	-122.41	-155.05	0.11	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,619.00	5.60	248.10	6,608.61	-102.18	-126.08	-163.93	0.44	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,713.00	5.10	246.70	6,702.20	-104.39	-129.44	-172.02	0.55	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,808.00	4.70	241.40	6,796.85	-106.88	-132.97	-179.31	0.64	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,903.00	4.10	242.10	6,891.57	-109.41	-136.43	-185.73	0.63	MWD	LEAM DRILLING SYSTEMS
10/3/2014	6,997.00	3.90	241.10	6,985.34	-111.70	-139.54	-191.50	0.23	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,092.00	3.30	238.60	7,080.16	-113.94	-142.53	-196.66	0.65	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,187.00	3.00	242.60	7,175.01	-115.86	-145.10	-201.20	0.39	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,281.00	2.70	247.70	7,268.90	-117.23	-147.07	-205.44	0.42	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,376.00	3.00	248.80	7,363.78	-118.35	-148.82	-209.82	0.32	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,436.00	2.70	244.90	7,423.71	-119.13	-149.98	-212.57	0.60	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,471.00	2.90	243.20	7,458.66	-119.65	-150.73	-214.10	0.62	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,535.00	5.20	276.40	7,522.51	-119.46	-151.14	-218.43	4.99	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,566.00	7.90	294.20	7,553.31	-117.98	-150.11	-221.77	10.80	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,598.00	10.90	306.30	7,584.88	-114.69	-147.42	-226.22	11.18	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,629.00	13.90	312.80	7,615.15	-109.76	-143.15	-231.31	10.66	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,661.00	17.20	316.30	7,645.98	-102.94	-137.12	-237.41	10.72	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,693.00	19.90	321.40	7,676.31	-94.42	-129.44	-244.07	9.84	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,724.00	21.90	326.30	7,705.27	-84.67	-120.50	-250.57	8.56	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,756.00	24.10	330.00	7,734.73	-73.24	-109.88	-257.15	8.22	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,787.00	27.10	332.80	7,762.68	-60.70	-98.11	-263.55	10.43	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,819.00	29.20	336.00	7,790.90	-46.31	-84.50	-270.05	8.08	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,850.00	31.10	339.90	7,817.71	-31.22	-70.07	-275.88	8.80	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,882.00	33.50	343.90	7,844.76	-14.39	-53.82	-281.17	10.04	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,913.00	35.20	346.90	7,870.35	-2.98	-36.89	-285.57	7.74	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,944.00	36.70	347.60	7,895.44	21.11	-19.14	-289.59	5.02	MWD	LEAM DRILLING SYSTEMS
10/3/2014	7,975.00	38.50	348.50	7,920.01	39.98	-0.64	-293.50	6.07	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,007.00	42.00	349.20	7,944.42	60.62	19.64	-297.49	11.03	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,038.00	45.80	349.90	7,966.76	82.09	40.78	-301.39	12.36	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,070.00	48.90	349.90	7,988.44	105.61	63.95	-305.51	9.69	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,102.00	51.20	349.70	8,008.98	130.12	88.09	-309.86	7.20	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,134.00	53.50	349.70	8,028.53	155.43	113.02	-314.39	7.19	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,165.00	55.90	349.20	8,046.44	180.71	137.89	-319.02	7.85	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,196.00	58.30	349.20	8,063.28	206.70	163.45	-323.90	7.74	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,228.00	60.60	349.90	8,079.54	234.23	190.55	-328.89	7.43	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8,260.00	63.10	350.20	8,094.64	262.43	218.34	-333.77	7.86	MWD	LEAM DRILLING SYSTEMS

Directional Survey

Sub-Division	County	Field Name	Region	State/Province						
DELAWARE BASIN	EDDY	PADUCA	DELAWARE BASIN WEST	NM						
Surface Legal Location		API#	Latitude (°)	Longitude (°)	Ground Elev. M ⁹⁹	Orig KB Elev. (ft)	Tubing Head Elevation (ft)			
Sec. 1 T25S R31E		3001542426	32° 9' 9.41" N	103° 43' 38.37" W	3,445.40	3,470.40				
Survey Data										
Date	MD (ftKB)	Ind (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	E/W (ft)	DLS (ft/100ft)	Survey Tool	Survey Company
10/3/2014	8:291.00	65.40	350.40	8:108.10	290.33	245.86	-338.47	7.44	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:323.00	67.50	351.10	8:120.89	319.66	274.81	-343.19	6.86	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:354.00	69.60	352.00	8:132.23	348.51	303.35	-347.42	7.29	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:386.00	72.40	352.00	8:142.64	378.76	333.31	-351.63	8.75	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:417.00	76.00	351.80	8:151.08	408.59	362.83	-355.84	11.63	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:449.00	81.00	351.50	8:157.46	439.93	393.85	-360.39	15.65	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:512.00	89.30	351.80	8:162.78	502.65	455.90	-369.50	13.18	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:539.00	90.10	351.50	8:162.92	529.65	482.62	-373.42	3.16	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:632.00	92.60	351.50	8:160.73	622.61	574.56	-387.16	2.69	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:726.00	91.70	351.10	8:157.21	716.54	667.41	-401.37	1.05	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:821.00	90.90	350.80	8:155.05	811.49	761.21	-416.31	0.90	MWD	LEAM DRILLING SYSTEMS
10/3/2014	8:916.00	90.70	352.20	8:153.72	906.48	855.15	-430.35	1.49	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:011.00	88.80	352.00	8:154.14	1,001.47	949.25	-443.40	2.01	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:106.00	88.20	352.30	8:156.63	1,096.44	1,043.32	-456.37	0.71	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:201.00	87.80	354.40	8:159.94	1,191.35	1,137.62	-467.37	2.25	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:272.00	88.70	355.00	8:162.11	1,262.24	1,208.28	-473.92	1.52	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:367.00	88.30	356.70	8:164.60	1,357.00	1,303.00	-480.80	1.84	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:462.00	88.60	357.60	8:167.17	1,451.58	1,397.84	-485.52	1.00	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:557.00	89.10	358.50	8:169.07	1,546.04	1,492.77	-488.75	1.08	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:652.00	88.60	358.10	8:170.98	1,640.46	1,587.71	-491.57	0.67	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:764.00	89.90	358.70	8:172.45	1,751.76	1,699.65	-494.69	1.28	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:840.00	89.90	359.70	8:172.58	1,827.16	1,775.64	-495.75	1.32	MWD	LEAM DRILLING SYSTEMS
10/3/2014	9:935.00	89.80	359.00	8:172.83	1,921.39	1,870.64	-496.83	0.74	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:029.00	90.40	359.20	8:172.66	2,014.68	1,964.62	-498.31	0.67	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:145.00	90.60	358.30	8:171.65	2,129.88	2,080.59	-500.84	0.79	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:240.00	89.70	356.60	8:171.40	2,224.45	2,175.49	-505.07	2.02	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:335.00	90.20	356.20	8:171.48	2,319.18	2,270.30	-511.03	0.67	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:428.00	91.40	356.40	8:170.19	2,411.91	2,363.10	-517.03	1.31	MWD	LEAM DRILLING SYSTEMS
10/3/2014	10:523.00	92.50	356.70	8:166.95	2,506.56	2,457.87	-522.74	1.20	MWD	LEAM DRILLING SYSTEMS
10/18/2	10:617.00	91.50	357.60	8:163.67	2,600.13	2,551.69	-527.42	1.43	MWD	LEAM DRILLING SYSTEMS
10/18/2	10:712.00	90.20	355.70	8:162.26	2,694.81	2,646.52	-532.97	2.42	MWD	LEAM DRILLING SYSTEMS
10/18/2	10:806.00	90.70	356.60	8:161.53	2,788.56	2,740.30	-539.28	1.10	MWD	LEAM DRILLING SYSTEMS
10/18/2	10:901.00	88.60	354.60	8:162.11	2,883.37	2,835.01	-546.56	3.05	MWD	LEAM DRILLING SYSTEMS
10/18/2	10:996.00	87.60	355.10	8:165.26	2,978.20	2,929.57	-555.09	1.18	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:090.00	89.40	356.40	8:167.72	3,071.96	3,023.27	-562.05	2.36	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:185.00	90.30	359.70	8:167.96	3,166.43	3,118.20	-565.28	3.60	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:279.00	89.40	359.00	8:168.21	3,259.66	3,212.20	-566.35	1.21	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:374.00	89.60	358.70	8:169.04	3,353.99	3,307.17	-568.26	0.38	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:468.00	90.70	359.90	8:168.79	3,447.24	3,401.16	-569.40	1.73	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:564.00	88.50	357.30	8:169.46	3,542.59	3,497.12	-571.75	3.55	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:659.00	87.50	355.50	8:172.78	3,637.25	3,591.87	-577.71	2.17	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:754.00	88.00	355.00	8:176.51	3,732.03	3,686.47	-585.57	0.74	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:850.00	89.10	355.10	8:178.94	3,827.87	3,782.08	-593.85	1.15	MWD	LEAM DRILLING SYSTEMS
10/18/2	11:945.00	90.40	355.10	8:179.35	3,922.73	3,876.73	-601.96	1.37	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:041.00	91.40	355.50	8:177.85	4,018.56	3,972.39	-609.83	1.12	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:136.00	90.80	355.30	8:176.02	4,113.38	4,067.07	-617.45	0.67	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:231.00	92.70	356.60	8:173.12	4,208.11	4,161.78	-624.15	2.42	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:327.00	92.70	356.00	8:168.60	4,303.74	4,257.47	-630.34	0.62	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:422.00	92.30	355.50	8:164.45	4,398.45	4,352.12	-637.38	0.67	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:517.00	92.00	356.20	8:160.89	4,493.17	4,446.80	-644.25	0.80	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:612.00	91.70	355.50	8:157.82	4,587.91	4,541.51	-651.12	0.80	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:707.00	91.90	356.20	8:154.84	4,682.66	4,636.21	-657.99	0.77	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:769.00	91.90	357.10	8:152.78	4,744.42	4,698.07	-661.61	1.45	MWD	LEAM DRILLING SYSTEMS
10/18/2	12:827.00	91.90	357.10	8:150.86	4,802.17	4,755.96	-664.54	0.00	BIT	LEAM DRILLING SYSTEMS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.
NMNM0503

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.

COTTON DRAW UNIT 172H

2. Name of Operator

DEVON ENERGY PRODUCTION COMPANY

Contact: MEGAN MORAVEC

Email: megan.moravec@dvn.com

9. API Well No.

30-015-42426

3a. Address

333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)

Ph: 405-552-3622

10. Field and Pool, or Exploratory

COTTON DRAW, DELAWARE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 1 T25S R31E SWSE 195FSL 1345FEL

11. County or Parish, and State

EDDY COUNTY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Drilling Operations
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.)

Unit CA/Agreement: 891005247X

(10/3/14-10/6/14) Spud @ 07:30. TD 17-1/2? hole @ 800?. RIH w/ 20 jts 13-3/8? 48# H-40 STC csg, set @ 800?. Lead w/ 735 sx CIC, yld 1.34 cu ft/sk. Disp w/ 120 bbls FW. Circ 252 sx cmt to surf. PT all BOPE @ 250/3000 psi, held all tests for 10 min, OK. PT csg to 1211 psi for 30 min 50% of burst.

(10/8/14-10/11/14) TD 12-1/4? hole @ 4440?. RIH w/ 101 jts 9-5/8? 40# J-55 LTC csg, set @ 4440?. Lead w/ 1250 sx CIC, yld 1.87 cu ft/sk. Tail w/ 430 sx CIC, yld 1.33 cu ft/sk. Disp w/ 333.1 bbls FW. Circ 70 bbls cmt to surf. PT all BOPE @ 250/3000 psi, OK. PT csg to 1500 psi for 30 min, OK.

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

**Electronic Submission #276125 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPAN, sent to the Carlsbad**

Name (Printed/Typed) MEGAN MORAVEC

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 11/05/2014

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 to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #276125 that would not fit on the form

32. Additional remarks, continued

(10/20/14-10/23/14) TD 8-3/4? hole @ 12827?. RIH w/ 287 jts 5-1/2? 17# HCP-110 BTC csg, set @ 12827?. Lead w/ 470 sx CIH, yld 1.98 cu ft/sk. Tail w/ 1435 sx CIH, yld 1.21 cu ft/sk. Disp w/ 297 bbls FW. Open DVT, set @ 6013.8?. Circ 255 sx cmt off top of DVT. 2nd lead w/ 430 sx Tuned Light, yld 2.67 cu ft/sk. Tail w/ 215 sx CIC, yld 1.33 cu ft/sk. Disp w/ 140 bbls FW, no cmt returns to surf. RR @ 18:00.