

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

<sup>1</sup> Operator name and Address CHEVRON U.S.A. INC. 6301 DEAUVILLE BLVD MIDLAND, TX 79706		<b>HOBBS OCD</b> <b>DEC 26 2017</b> <b>RECEIVED</b>		<sup>2</sup> OGRID Number 4323	
<sup>4</sup> API Number 30 - 025-43641		<sup>5</sup> Pool Name JENNINGS; UPPER BONE SPRING SHALE		<sup>6</sup> Pool Code 97838	
<sup>7</sup> Property Code 317456		<sup>8</sup> Property Name SD WE 15 FED P9		<sup>9</sup> Well Number 6H	

II. <sup>10</sup> 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	15	26S	32E		12	SOUTH	1446	EAST	LEA

<sup>11</sup> 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
B	15	26S	32E		173	NORTH	1351	EAST	LEA
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code FLOWING	<sup>14</sup> Gas Connection Date 11/01/2017	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date				

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> O/G/W
	WESTERN REFINING	O
		G
	DBM	
		W
	OIL/MESQUITE/RECYCLE	

IV. Well Completion Data

<sup>21</sup> Spud Date 04/20/2017	<sup>22</sup> Ready Date 10/14/2017	<sup>23</sup> TD 13923	<sup>24</sup> PBTB 13865	<sup>25</sup> Perforations 9260 - 13,741'	<sup>26</sup> DHC, MC
<sup>27</sup> Hole Size	<sup>28</sup> Casing & Tubing Size	<sup>29</sup> Depth Set	<sup>30</sup> Sacks Cement		
17.5	13 3/8	655	827		
12.25	9 5/8	4497	1494		
8.75	5 1/2	13913	1745		
	2 7/8	8665			

V. Well Test Data

<sup>31</sup> Date New Oil 11/01/2017	<sup>32</sup> Gas Delivery Date 11/01/2017	<sup>33</sup> Test Date 12/12/2017	<sup>34</sup> Test Length 24 HRS	<sup>35</sup> Tbg. Pressure 683	<sup>36</sup> Csg. Pressure 6
<sup>37</sup> Choke Size 55/64	<sup>38</sup> Oil 758	<sup>39</sup> Water 1784	<sup>40</sup> Gas 1670	<sup>41</sup> Test Method FLOWING	

<sup>42</sup> 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>Denise Pinkerton</i>		OIL CONSERVATION DIVISION	
Printed name: DENISE PINKERTON		Approved by: <i>[Signature]</i>	
Title: PERMITTING SPECIALIST		Title: <i>Petroleum Engineer</i>	
E-mail Address: leakejd@chevron.com		Approval Date: <i>1-19-18</i>	
Date: 12/20/2017	Phone: 432-687-7375	Pending BLM approvals will subsequently be reviewed and scanned <i>GCP 1-19-18</i>	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**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.  
NMNM118723

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
SD WE 15 FED P9 6H9. API Well No.  
30-025-4364110. Field and Pool or Exploratory Area  
JENNINGS;UPR BN SPR SH11. County or Parish, State  
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
CHEVRON U.S.A. INC.Contact: DENISE PINKERTON  
E-Mail: leakejd@chevron.com3a. Address  
6301 DEAUVILLE BLVD  
MIDLAND, TX 797063b. Phone No. (include area code)  
Ph: 432-687-73754. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 15 T26S R32E Mer NMP 12FSL 1446FEL**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"/> Hydraulic Fracturing	<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 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.

THIS REPORT IS FOR THE SPUD, DRILLING OPERATIONS, AND COMPLETION OF THE SUBJECT NEW WELL.

## PLEASE FIND ATTACHED:

- \*Daily drilling operations and completion info
- \*"As Drilled" C-102
- \*Wellbore Schematic
- \*Actual Wellpath Report
- \*Perforation Summary
- \*Frac Summary

HOBBS OCD

DEC 26 2017

RECEIVED

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

Electronic Submission #398588 verified by the BLM Well Information System  
For CHEVRON U.S.A. INC., sent to the Hobbs

Name (Printed/Typed) DENISE PINKERTON

Title PERMITTING SPECIALIST

Signature (Electronic Submission)

Date 12/20/2017

**THIS SPACE FOR FEDERAL OR STATE**

Approved By

Title

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

Pending BLM approvals will  
subsequently be reviewed  
and scanned

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)

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



**SD WE 15 FED P9 #6H**     **30-025-43641**

**HOBBS OCD**

**DRILLED NEW OIL WELL AS FOLLOWS:**

**DEC 26 2017**

04/20/2017: **SPUD WELL**

04/21/2017: Drill 147 – 665'. TD surface hole section.

**RECEIVED**

**SURFACE CASING**

04/21/2017: Run 13 3/8", 54.5#, J-55 STC surface casing & set @ 655'.

Schlumberger cemented w/Tail 827 sx Class C Cmt. DENSITY:14.80. YIELD:1.33. FLUID MIX RATIO:6.37.

Returns to surface. 114 bbls of cement to surface.

04/27/2017: Install test plug. Fill stack & choke manifold. Test BOPE to 250 psi low/5000 psi high (3500 high on annular).

04/28/2017: Test 13 3/8" surface casing to 1500 psi for 30 minutes. Good test. Drill out float eqpt, cmt & rathole to 675'. Drill 10' of new formation to 675'.

04/28/2017 through 04/29/2017: Drill 665 – 4507'.

**INTERMEDIATE CASING**

04/30/2017: Run 9 5/8", 40#, L-80 LTC casing & set @ 4497'.

Schlumberger cemented w/Lead 1032 sx Class C Cmt. DENSITY:11.90. YIELD:2.43. FLUID MIX RATIO:13.98. TAIL CMT w/462 sx Class C CMT. DENSITY:14.80. YIELD:1.35. FLUID MIX RATIO:6.35.

Displace cement w/334 bbls of OBM. Bump plug w/500 psi over final circ pressure.

Returns to surface. 220 bbls of cement to surface. Plug bumped at calc displacement.

Install pack off. Test to 5000psi for 15 mins. Install blanking plug. Test to 5000 psi for 15 mins.

05/15/2017: Install test plug. Fill stack & choke manifold. Test full BOPE to 250 psi low/5000 psi high (3500 high on annular)

05/16/2017: TIH w/BHA #3. Install rotating head @ 1213. TIH TO 4408. Tag TOC @ 4411.

Test 9 5/8" csg to 2830psi for 30 mins. Good test. Drill out float eqpt, cmt & rathole to 4507. Drill 10' new formation to 4517.

05/16/2017 through 05/26/2017: Drill 4517 – 13923' TD

**PRODUCTION CASING**

05/27/2017: Ran 5 1/2", 20#, HCP110 TXP-BTC casing & set @ 13,913'.

Break circulation @ 4500'.

Schlumberger cemented w/Lead 615 sx Class H cmt. DENSITY:11.50. YIELD: 2.77. FLUID MIX RATIO:16.18

LEAD 2 w/ 1005 sx Class H cmt. DENSITY:12.50. YIELD:1.57. FLUID MIX RATIO:8.47.

TAIL w/125 sx Class H cmt. DENSITY: 15.00. YIELD: 2.18. FLUID MIX RATIO:2.18.

Returns to surface. 50 bbls spacer to surface. Displace cement w/307 bbls FW. Bump plug. Hold 500psi over. 2 bbls bled back. Lost returns w/8 bbls in displacement. Plug bumped on calculated displacement.

05/27/2017: RELEASE RIG.

**COMPLETED NEW DRILL AS FOLLOWS:**

08/18/2017: MIRU.

08/19/2017: TIH w/CLB logging assembly. Stopped @ 9212'. Log CBL from 9212-surface @ 60 ft/min.  
TOC @ 2750'.

08/25/2017: Open well. Pmp 14 bbls & test production casing to 9800psi for 30 mins. Good test.  
Establish injection rate. 18 BPM @ 7400 psi.

09/28/2017 through 10/14/2017: Perf & frac 23 stages Upper Bone Spring from 9260 – 13,741'.  
Frac w/Total Proppant 7,508,028.00 lbs

**\*\*SEE ATTACHED DETAILED PERF & FRAC REPORT**

11/01/2017: Place well on production.

11/02/2017: Ran 2 7/8" tubing set @ 8665'.

11/03/2017: Pressure test wellhead 250-4000#. 15/15 on chart. Good test. Circulate pkr fluid 190 bbls  
@ 2.8 bpm w/350 psi.

11/03/2017: RELEASE RIG.

12/12/2017: On 24 hour OPT flowing:

Oil – 758

Gas – 1670

Water – 1784

GOR – 2203

Tubing psi – 683

Casing psi – 6

Choke – 55/64

TOC - 2750

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMMN1187231a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other  
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.  
Other \_\_\_\_\_

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator  
CHEVRON U.S.A. INC. Contact: DENISE PINKERTON  
E-Mail: leakejd@chevron.com8. Lease Name and Well No.  
SD WE 15 FED P9 6H3. Address 6301 DEAUVILLE BLVD  
MIDLAND, TX 797063a. Phone No. (include area code)  
Ph: 432-687-73759. API Well No.  
30-025-43641

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 12FSL 1446FEL

At top prod interval reported below 173FNL 1351FEL

At total depth 173FNL 1351FEL

10. Field and Pool, or Exploratory  
JENNINGS;UPR BN SPR SH11. Sec., T., R., M., or Block and Survey  
or Area Sec 15 T26S R32E Mer NMP12. County or Parish  
LEA13. State  
NM14. Date Spudded  
04/20/201715. Date T.D. Reached  
05/26/201716. Date Completed  
☐ D & A ☒ Ready to Prod.  
10/14/201717. Elevations (DF, KB, RT, GL)\*  
3157 GL18. Total Depth: MD  
TVD 13923  
898819. Plug Back T.D.: MD  
TVD 1386520. Depth Bridge Plug Set: MD  
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
CBL22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit analysis)  
Directional Survey? ☐ No ☒ Yes (Submit analysis)

## 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
17.500	13.375 J55	54.5	0	655		827		0	
12.250	9.625 L80	40.0	0	4497		1494		0	
8.750	5.500 HCP110	20.0	0	13913		1745		2750	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8665	8665						

## 25. Producing Intervals

## 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
UPPER BONE SPRING SHALE	9260	13741	9260 TO 13741			PRODUCING **SEE DETAILED PI
B)						
C)						
D)						

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9260 TO 13741	FRAC WITH TOTAL PROPPANT - 7,508,028.00 LBS **SEE DETAILED FRAC SUMMARY

## 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
11/01/2017	12/12/2017	24	→						FLOWS FROM WELL
Choke Size	Tbg. Press Flwg	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
55/64	SI	6.0	→	758	1670	1784	2203	POW	

## 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
			→					
Choke Size	Tbg. Press Flwg	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status
	SI		→					

Pending BLM approvals will  
subsequently be reviewed  
and scanned

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #398631 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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



## 28b. Production - Interval C

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	

## 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(Sold, 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
CASTILE LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIME UPPER AVALON	2713 4529 4557 5521 7110 8716 8756	4528 4556 5520 7109 8715 8755 13923	ANHYDRITE LIMESTONE SANDSTONE SANDSTONE SANDSTONE SHALE/LIMESTONE SHALE/LIMESTONE	CASTILE LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIME UPPER AVALON	2713 4529 4557 5521 7110 8716 8756

## 32. Additional remarks (include plugging procedure):

## 33. Circle enclosed attachments:

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7. Other:     |                       |

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

**Electronic Submission #398631 Verified by the BLM Well Information System.  
For CHEVRON U.S.A. INC., sent to the Hobbs**

Name (please print) DENISE PINKERTONTitle PERMITTING SPECIALISTSignature (Electronic Submission)Date 12/20/2017

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.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***





# Wellbore Schematic

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent
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Job Details						
Job Category			Start Date		Rig/Unit End Date	
Completion			8/18/2017		10/28/2017	
Completion			11/2/2017		11/4/2017	
Casing Strings						
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (MD) (ftKB)	
Surface	13 3/8	54.50	J-55	ST&C	655	
Intermediate Casing 1	9 5/8	40.00	L-80	LT&C	4,497	
Production Casing	5 1/2	20.00	HCP-110	TXP-BTC-S	13,913	
Tubing Strings						
Tubing set at 8,665.0ftKB on 11/2/2017 08:17						
Tubing Description		Run Date		String Length (ft)		Set Depth (MD) (ftKB)
Tubing		11/2/2017		1,781.83		8,665.0
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Btm (ftKB)
Tubing	60	2 7/8	6.50	L-80	565.13	7,448.3
GAS LIFT VALVE #3	1	4.335			4.10	7,452.4
Tubing	33	2 7/8	6.50	L-80	531.84	7,984.2
GAS LIFT VALVE #2	1	4.335			4.10	7,988.3
Tubing	19	2 7/8	6.50	L-80	556.12	8,544.5
GAS LIFT VALVE #1	1	4.335			4.10	8,548.6
Tubing	17	2 7/8	6.50	L-80	93.71	8,642.3
On-Off Tool	1	4 1/2			1.50	8,643.8
Packer	1	4 1/2			7.80	8,651.6
Tubing	1	2 7/8	6.40	L-80	6.26	8,657.8
XN - Nipple	1	2 7/8			1.16	8,659.0
Tubing Pup Joint	1	2 7/8	6.50	L-80	4.10	8,663.1
Magnum Disk	1	3.668			1.91	8,665.0
Perforations						
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone	
10/13/2017	9,260.0	9,261.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,274.0	9,275.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,288.0	9,289.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,302.0	9,303.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,316.0	9,317.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,330.0	9,331.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,343.0	9,344.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,358.0	9,359.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,372.0	9,373.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,384.0	9,385.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,400.0	9,401.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,414.0	9,415.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,427.0	9,428.0	4.0	4	Avalon, Original Hole	
10/13/2017	9,442.0	9,443.0	5.0	5	Avalon, Original Hole	
10/13/2017	9,456.0	9,457.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,468.0	9,469.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,484.0	9,485.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,498.0	9,499.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,512.0	9,513.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,526.0	9,527.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,540.0	9,541.0	2.0	2	Avalon, Original Hole	
10/13/2017	9,552.0	9,553.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,568.0	9,569.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,582.0	9,583.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,596.0	9,597.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,610.0	9,611.0	3.0	3	Avalon, Original Hole	
10/13/2017	9,624.0	9,625.0	4.0	4	Avalon, Original Hole	
10/13/2017	9,638.0	9,639.0	5.0	5	Avalon, Original Hole	
10/12/2017	9,652.0	9,653.0	2.0	2	Avalon, Original Hole	
10/12/2017	9,666.0	9,667.0	2.0	2	Avalon, Original Hole	
10/12/2017	9,680.0	9,681.0	2.0	2	Avalon, Original Hole	





# Wellbore Schematic

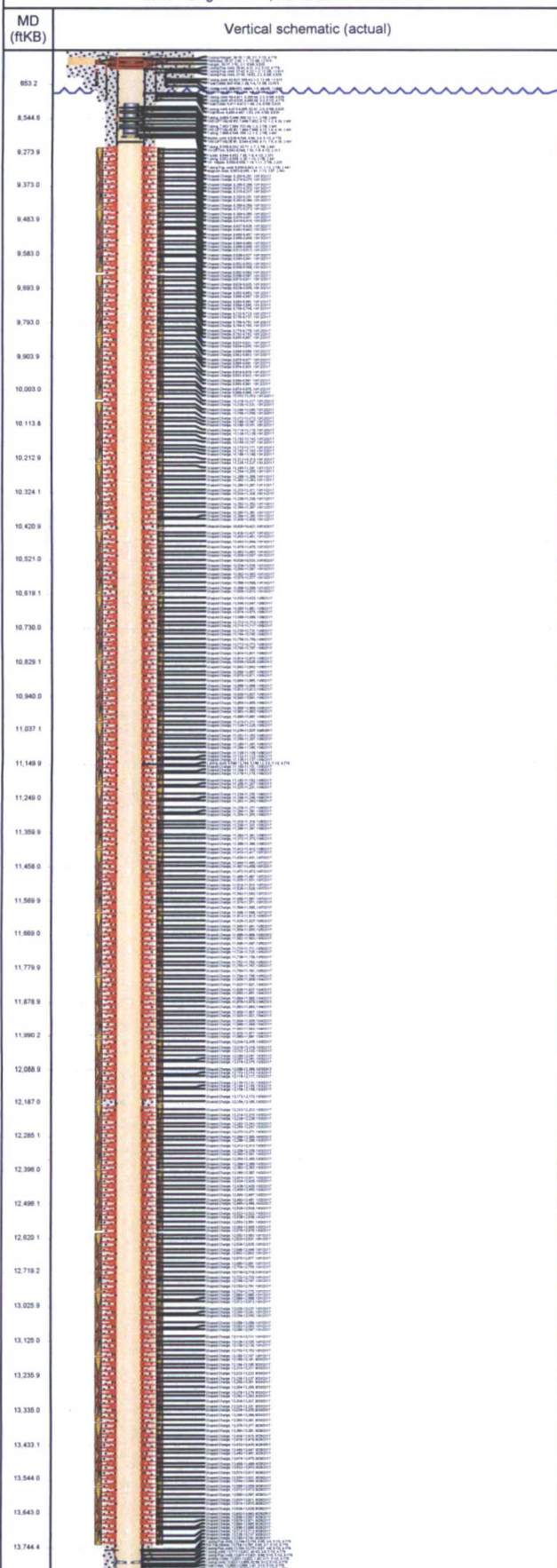
Well Name  
SD WE 15 FED P9 6H

Lease  
SD WE 15 FED P9

Field Name  
JENNINGS

Business Unit  
Mid-Continent

Land - Original Hole, 12/12/2017 9:18:09 AM



## Perforations

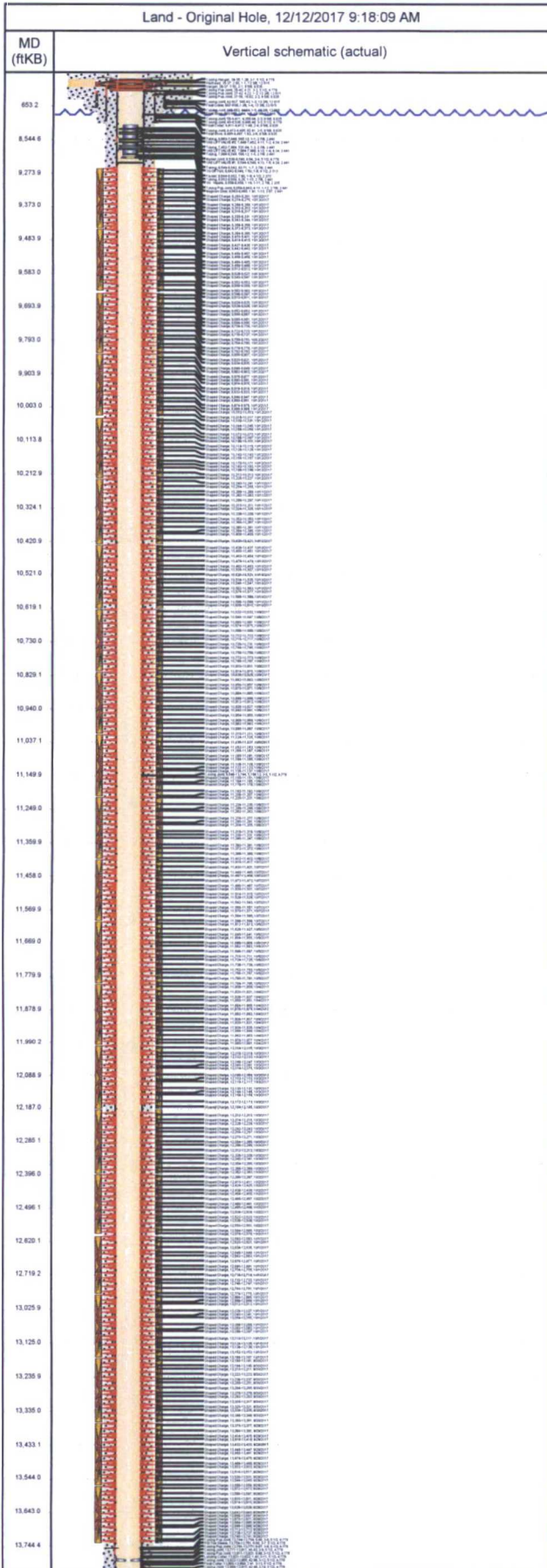
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
10/12/2017	9,694.0	9,695.0	2.0	2	Avalon, Original Hole
10/12/2017	9,708.0	9,709.0	2.0	2	Avalon, Original Hole
10/12/2017	9,722.0	9,723.0	2.0	2	Avalon, Original Hole
10/12/2017	9,736.0	9,737.0	2.0	2	Avalon, Original Hole
10/12/2017	9,750.0	9,751.0	3.0	3	Avalon, Original Hole
10/12/2017	9,764.0	9,765.0	3.0	3	Avalon, Original Hole
10/12/2017	9,778.0	9,779.0	3.0	3	Avalon, Original Hole
10/12/2017	9,792.0	9,793.0	3.0	3	Avalon, Original Hole
10/12/2017	9,806.0	9,807.0	3.0	3	Avalon, Original Hole
10/12/2017	9,820.0	9,821.0	4.0	4	Avalon, Original Hole
10/12/2017	9,834.0	9,835.0	5.0	5	Avalon, Original Hole
10/12/2017	9,848.0	9,849.0	2.0	2	Avalon, Original Hole
10/12/2017	9,862.0	9,863.0	2.0	2	Avalon, Original Hole
10/12/2017	9,876.0	9,877.0	2.0	2	Avalon, Original Hole
10/12/2017	9,890.0	9,891.0	2.0	2	Avalon, Original Hole
10/12/2017	9,904.0	9,905.0	2.0	2	Avalon, Original Hole
10/12/2017	9,918.0	9,919.0	2.0	2	Avalon, Original Hole
10/12/2017	9,932.0	9,933.0	2.0	2	Avalon, Original Hole
10/12/2017	9,946.0	9,947.0	3.0	3	Avalon, Original Hole
10/12/2017	9,960.0	9,961.0	3.0	3	Avalon, Original Hole
10/12/2017	9,974.0	9,975.0	3.0	3	Avalon, Original Hole
10/12/2017	9,988.0	9,989.0	3.0	3	Avalon, Original Hole
10/12/2017	10,002.0	10,003.0	3.0	3	Avalon, Original Hole
10/12/2017	10,016.0	10,017.0	4.0	4	Avalon, Original Hole
10/12/2017	10,030.0	10,031.0	5.0	5	Avalon, Original Hole
10/12/2017	10,044.0	10,045.0	2.0	2	Avalon, Original Hole
10/12/2017	10,058.0	10,059.0	2.0	2	Avalon, Original Hole
10/12/2017	10,072.0	10,073.0	2.0	2	Avalon, Original Hole
10/12/2017	10,086.0	10,087.0	2.0	2	Avalon, Original Hole
10/12/2017	10,100.0	10,101.0	2.0	2	Avalon, Original Hole
10/12/2017	10,114.0	10,115.0	2.0	2	Avalon, Original Hole
10/12/2017	10,128.0	10,129.0	2.0	2	Avalon, Original Hole
10/12/2017	10,142.0	10,143.0	3.0	3	Avalon, Original Hole
10/12/2017	10,156.0	10,157.0	3.0	3	Avalon, Original Hole
10/12/2017	10,170.0	10,171.0	3.0	3	Avalon, Original Hole
10/12/2017	10,182.0	10,183.0	3.0	3	Avalon, Original Hole
10/12/2017	10,198.0	10,199.0	3.0	3	Avalon, Original Hole
10/12/2017	10,212.0	10,213.0	4.0	4	Avalon, Original Hole
10/12/2017	10,226.0	10,227.0	5.0	5	Avalon, Original Hole
10/11/2017	10,240.0	10,241.0	2.0	2	Avalon, Original Hole
10/11/2017	10,254.0	10,255.0	2.0	2	Avalon, Original Hole
10/11/2017	10,268.0	10,269.0	2.0	2	Avalon, Original Hole
10/11/2017	10,282.0	10,283.0	2.0	2	Avalon, Original Hole
10/11/2017	10,296.0	10,297.0	2.0	2	Avalon, Original Hole
10/11/2017	10,310.0	10,311.0	2.0	2	Avalon, Original Hole
10/11/2017	10,324.0	10,325.0	2.0	2	Avalon, Original Hole
10/11/2017	10,338.0	10,339.0	3.0	3	Avalon, Original Hole
10/11/2017	10,352.0	10,353.0	3.0	3	Avalon, Original Hole
10/11/2017	10,366.0	10,367.0	3.0	3	Avalon, Original Hole
10/11/2017	10,380.0	10,381.0	3.0	3	Avalon, Original Hole
10/11/2017	10,394.0	10,395.0	3.0	3	Avalon, Original Hole
10/11/2017	10,408.0	10,409.0	4.0	4	Avalon, Original Hole
10/11/2017	10,420.0	10,421.0	5.0	5	Avalon, Original Hole
10/10/2017	10,436.0	10,437.0	2.0	2	Avalon, Original Hole
10/10/2017	10,450.0	10,451.0	2.0	2	Avalon, Original Hole
10/10/2017	10,463.0	10,464.0	2.0	2	Avalon, Original Hole
10/10/2017	10,478.0	10,479.0	2.0	2	Avalon, Original Hole
10/10/2017	10,492.0	10,493.0	2.0	2	Avalon, Original Hole





# Wellbore Schematic

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent
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Perforations					
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
10/10/2017	10,506.0	10,507.0	2.0	2	Avalon, Original Hole
10/10/2017	10,520.0	10,521.0	2.0	2	Avalon, Original Hole
10/10/2017	10,534.0	10,535.0	3.0	3	Avalon, Original Hole
10/10/2017	10,546.0	10,547.0	3.0	3	Avalon, Original Hole
10/10/2017	10,562.0	10,563.0	3.0	3	Avalon, Original Hole
10/10/2017	10,576.0	10,577.0	3.0	3	Avalon, Original Hole
10/10/2017	10,588.0	10,589.0	3.0	3	Avalon, Original Hole
10/10/2017	10,598.0	10,599.0	4.0	4	Avalon, Original Hole
10/10/2017	10,609.0	10,610.0	5.0	5	Avalon, Original Hole
10/9/2017	10,632.0	10,633.0	2.0	2	Avalon, Original Hole
10/9/2017	10,646.0	10,647.0	2.0	2	Avalon, Original Hole
10/9/2017	10,660.0	10,661.0	2.0	2	Avalon, Original Hole
10/9/2017	10,674.0	10,675.0	2.0	2	Avalon, Original Hole
10/9/2017	10,688.0	10,689.0	2.0	2	Avalon, Original Hole
10/9/2017	10,702.0	10,703.0	2.0	2	Avalon, Original Hole
10/9/2017	10,716.0	10,717.0	2.0	2	Avalon, Original Hole
10/9/2017	10,730.0	10,731.0	3.0	3	Avalon, Original Hole
10/9/2017	10,744.0	10,745.0	3.0	3	Avalon, Original Hole
10/9/2017	10,758.0	10,759.0	3.0	3	Avalon, Original Hole
10/9/2017	10,772.0	10,773.0	3.0	3	Avalon, Original Hole
10/9/2017	10,786.0	10,787.0	3.0	3	Avalon, Original Hole
10/9/2017	10,800.0	10,801.0	4.0	4	Avalon, Original Hole
10/9/2017	10,814.0	10,815.0	5.0	5	Avalon, Original Hole
10/9/2017	10,828.0	10,829.0	2.0	2	Avalon, Original Hole
10/9/2017	10,842.0	10,843.0	2.0	2	Avalon, Original Hole
10/9/2017	10,856.0	10,857.0	2.0	2	Avalon, Original Hole
10/9/2017	10,870.0	10,871.0	2.0	2	Avalon, Original Hole
10/9/2017	10,884.0	10,885.0	2.0	2	Avalon, Original Hole
10/9/2017	10,898.0	10,899.0	2.0	2	Avalon, Original Hole
10/9/2017	10,912.0	10,913.0	2.0	2	Avalon, Original Hole
10/9/2017	10,926.0	10,927.0	3.0	3	Avalon, Original Hole
10/9/2017	10,940.0	10,941.0	3.0	3	Avalon, Original Hole
10/9/2017	10,954.0	10,955.0	3.0	3	Avalon, Original Hole
10/9/2017	10,968.0	10,969.0	3.0	3	Avalon, Original Hole
10/9/2017	10,982.0	10,983.0	3.0	3	Avalon, Original Hole
10/9/2017	10,996.0	10,997.0	4.0	4	Avalon, Original Hole
10/9/2017	11,010.0	11,011.0	5.0	5	Avalon, Original Hole
10/8/2017	11,024.0	11,025.0	2.0	2	Avalon, Original Hole
10/8/2017	11,036.0	11,037.0	2.0	2	Avalon, Original Hole
10/8/2017	11,052.0	11,053.0	2.0	2	Avalon, Original Hole
10/8/2017	11,066.0	11,067.0	2.0	2	Avalon, Original Hole
10/8/2017	11,080.0	11,081.0	2.0	2	Avalon, Original Hole
10/8/2017	11,094.0	11,095.0	2.0	2	Avalon, Original Hole
10/8/2017	11,108.0	11,109.0	2.0	2	Avalon, Original Hole
10/8/2017	11,122.0	11,123.0	3.0	3	Avalon, Original Hole
10/8/2017	11,136.0	11,137.0	3.0	3	Avalon, Original Hole
10/8/2017	11,150.0	11,151.0	3.0	3	Avalon, Original Hole
10/8/2017	11,164.0	11,165.0	3.0	3	Avalon, Original Hole
10/8/2017	11,178.0	11,179.0	3.0	3	Avalon, Original Hole
10/8/2017	11,192.0	11,193.0	4.0	4	Avalon, Original Hole
10/8/2017	11,206.0	11,207.0	5.0	5	Avalon, Original Hole
10/8/2017	11,220.0	11,221.0	2.0	2	Avalon, Original Hole
10/8/2017	11,234.0	11,235.0	2.0	2	Avalon, Original Hole
10/8/2017	11,248.0	11,249.0	2.0	2	Avalon, Original Hole
10/8/2017	11,262.0	11,263.0	2.0	2	Avalon, Original Hole
10/8/2017	11,276.0	11,277.0	2.0	2	Avalon, Original Hole
10/8/2017	11,290.0	11,291.0	2.0	2	Avalon, Original Hole
10/8/2017	11,304.0	11,305.0	2.0	2	Avalon, Original Hole





# Wellbore Schematic

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent
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Land - Original Hole, 12/12/2017 9:18:10 AM		Perforations					
MD (ftKB)	Vertical schematic (actual)	Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
863.2		10/8/2017	11,318.0	11,319.0	3.0	3	Avalon, Original Hole
8,544.6		10/8/2017	11,330.0	11,331.0	3.0	3	Avalon, Original Hole
8,273.9		10/8/2017	11,346.0	11,347.0	3.0	3	Avalon, Original Hole
9,373.0		10/8/2017	11,360.0	11,361.0	3.0	3	Avalon, Original Hole
9,483.9		10/8/2017	11,372.0	11,373.0	3.0	3	Avalon, Original Hole
9,583.0		10/8/2017	11,388.0	11,389.0	4.0	4	Avalon, Original Hole
9,893.9		10/8/2017	11,402.0	11,403.0	5.0	5	Avalon, Original Hole
9,793.0		10/7/2017	11,416.0	11,417.0	2.0	2	Avalon, Original Hole
9,903.9		10/7/2017	11,430.0	11,431.0	2.0	2	Avalon, Original Hole
10,003.0		10/7/2017	11,444.0	11,445.0	2.0	2	Avalon, Original Hole
10,113.8		10/7/2017	11,457.0	11,458.0	2.0	2	Avalon, Original Hole
10,212.9		10/7/2017	11,472.0	11,473.0	2.0	2	Avalon, Original Hole
10,324.1		10/7/2017	11,486.0	11,487.0	2.0	2	Avalon, Original Hole
10,420.9		10/7/2017	11,500.0	11,501.0	2.0	2	Avalon, Original Hole
10,521.0		10/7/2017	11,514.0	11,515.0	3.0	3	Avalon, Original Hole
10,619.1		10/7/2017	11,528.0	11,529.0	3.0	3	Avalon, Original Hole
10,730.0		10/7/2017	11,542.0	11,543.0	3.0	3	Avalon, Original Hole
10,829.1		10/7/2017	11,556.0	11,557.0	3.0	3	Avalon, Original Hole
10,940.0		10/7/2017	11,570.0	11,571.0	3.0	3	Avalon, Original Hole
11,037.1		10/7/2017	11,584.0	11,585.0	4.0	4	Avalon, Original Hole
11,149.9		10/7/2017	11,598.0	11,599.0	5.0	5	Avalon, Original Hole
11,249.0		10/5/2017	11,612.0	11,613.0	2.0	2	Avalon, Original Hole
11,359.9		10/5/2017	11,626.0	11,627.0	2.0	2	Avalon, Original Hole
11,458.0		10/5/2017	11,640.0	11,641.0	2.0	2	Avalon, Original Hole
11,589.9		10/5/2017	11,654.0	11,655.0	2.0	2	Avalon, Original Hole
11,689.0		10/5/2017	11,668.0	11,669.0	2.0	2	Avalon, Original Hole
11,779.9		10/5/2017	11,682.0	11,683.0	2.0	2	Avalon, Original Hole
11,878.9		10/5/2017	11,696.0	11,697.0	2.0	2	Avalon, Original Hole
11,990.2		10/5/2017	11,710.0	11,711.0	3.0	3	Avalon, Original Hole
12,088.9		10/5/2017	11,724.0	11,725.0	3.0	3	Avalon, Original Hole
12,187.0		10/5/2017	11,738.0	11,739.0	3.0	3	Avalon, Original Hole
12,285.1		10/5/2017	11,752.0	11,753.0	3.0	3	Avalon, Original Hole
12,386.0		10/5/2017	11,766.0	11,767.0	3.0	3	Avalon, Original Hole
12,496.1		10/5/2017	11,780.0	11,781.0	4.0	4	Avalon, Original Hole
12,620.1		10/5/2017	11,794.0	11,795.0	5.0	5	Avalon, Original Hole
12,719.2		10/4/2017	11,808.0	11,809.0	2.0	2	Avalon, Original Hole
13,025.9		10/4/2017	11,820.0	11,821.0	2.0	2	Avalon, Original Hole
13,125.0		10/4/2017	11,836.0	11,837.0	2.0	2	Avalon, Original Hole
13,235.9		10/4/2017	11,850.0	11,851.0	2.0	2	Avalon, Original Hole
13,335.0		10/4/2017	11,864.0	11,865.0	2.0	2	Avalon, Original Hole
13,433.1		10/4/2017	11,878.0	11,879.0	2.0	2	Avalon, Original Hole
13,544.0		10/4/2017	11,892.0	11,893.0	2.0	2	Avalon, Original Hole
13,643.0		10/4/2017	11,906.0	11,907.0	3.0	3	Avalon, Original Hole
13,744.4		10/4/2017	11,920.0	11,921.0	3.0	3	Avalon, Original Hole
		10/4/2017	11,934.0	11,935.0	3.0	3	Avalon, Original Hole
		10/4/2017	11,948.0	11,949.0	3.0	3	Avalon, Original Hole
		10/4/2017	11,962.0	11,963.0	3.0	3	Avalon, Original Hole
		10/4/2017	11,976.0	11,977.0	4.0	4	Avalon, Original Hole
		10/4/2017	11,990.0	11,991.0	5.0	5	Avalon, Original Hole
		10/3/2017	12,004.0	12,005.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,018.0	12,019.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,032.0	12,033.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,046.0	12,047.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,060.0	12,061.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,074.0	12,075.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,088.0	12,089.0	2.0	2	Avalon, Original Hole
		10/3/2017	12,102.0	12,103.0	3.0	3	Avalon, Original Hole
		10/3/2017	12,116.0	12,117.0	3.0	3	Avalon, Original Hole





# Wellbore Schematic

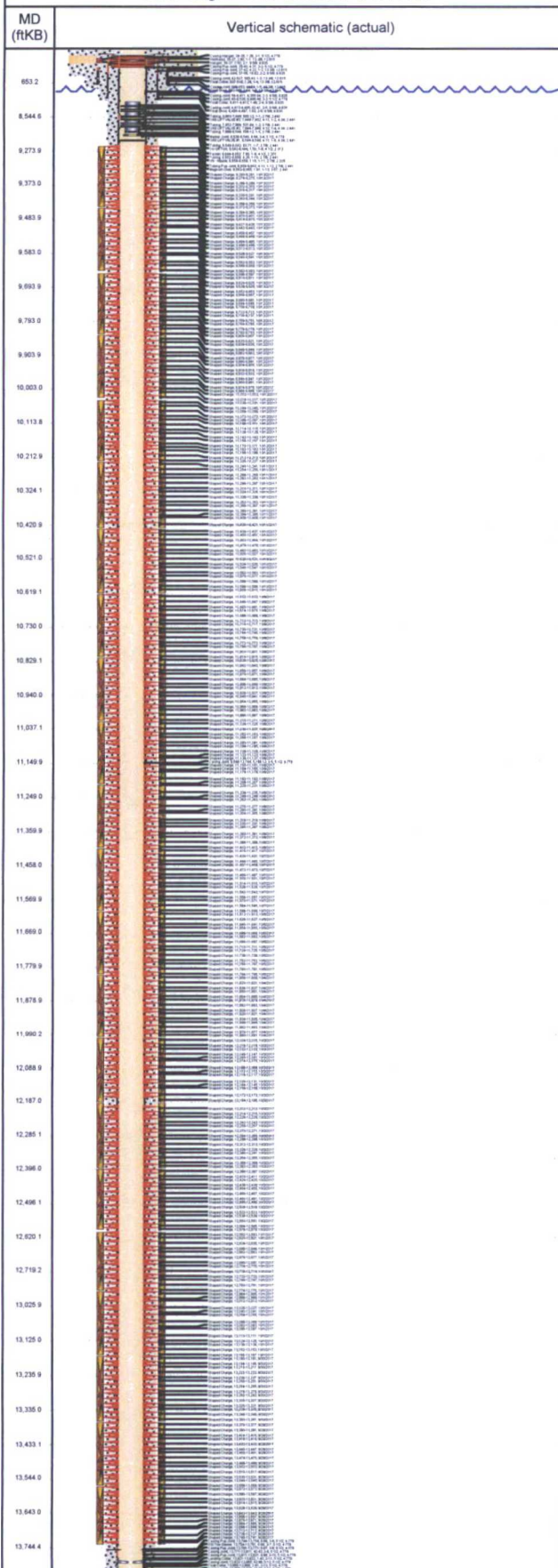
Well Name  
SD WE 15 FED P9 6H

Lease  
SD WE 15 FED P9

Field Name  
JENNINGS

Business Unit  
Mid-Continent

Land - Original Hole, 12/12/2017 9:18:11 AM



## Perforations

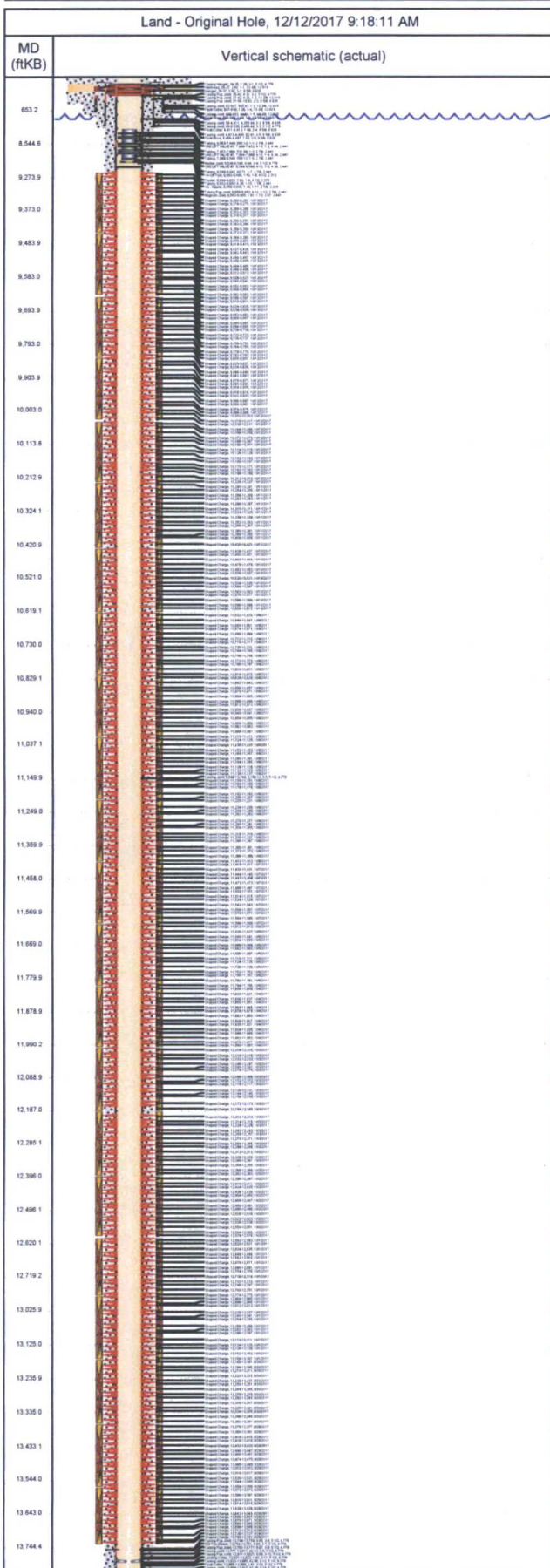
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
10/3/2017	12,130.0	12,131.0	3.0	3	Avalon, Original Hole
10/3/2017	12,144.0	12,145.0	3.0	3	Avalon, Original Hole
10/3/2017	12,158.0	12,159.0	3.0	3	Avalon, Original Hole
10/3/2017	12,172.0	12,173.0	4.0	4	Avalon, Original Hole
10/3/2017	12,184.0	12,185.0	5.0	5	Avalon, Original Hole
10/3/2017	12,202.0	12,203.0	2.0	2	Avalon, Original Hole
10/3/2017	12,214.0	12,215.0	2.0	2	Avalon, Original Hole
10/3/2017	12,228.0	12,229.0	2.0	2	Avalon, Original Hole
10/3/2017	12,242.0	12,243.0	2.0	2	Avalon, Original Hole
10/3/2017	12,256.0	12,257.0	2.0	2	Avalon, Original Hole
10/3/2017	12,270.0	12,271.0	2.0	2	Avalon, Original Hole
10/3/2017	12,284.0	12,285.0	2.0	2	Avalon, Original Hole
10/3/2017	12,298.0	12,299.0	3.0	3	Avalon, Original Hole
10/3/2017	12,312.0	12,313.0	3.0	3	Avalon, Original Hole
10/3/2017	12,328.0	12,329.0	3.0	3	Avalon, Original Hole
10/3/2017	12,340.0	12,341.0	3.0	3	Avalon, Original Hole
10/3/2017	12,354.0	12,355.0	3.0	3	Avalon, Original Hole
10/3/2017	12,368.0	12,369.0	4.0	4	Avalon, Original Hole
10/3/2017	12,382.0	12,383.0	5.0	5	Avalon, Original Hole
10/2/2017	12,396.0	12,397.0	2.0	2	Avalon, Original Hole
10/2/2017	12,410.0	12,411.0	2.0	2	Avalon, Original Hole
10/2/2017	12,424.0	12,425.0	2.0	2	Avalon, Original Hole
10/2/2017	12,438.0	12,439.0	2.0	2	Avalon, Original Hole
10/2/2017	12,454.0	12,455.0	2.0	2	Avalon, Original Hole
10/2/2017	12,466.0	12,467.0	2.0	2	Avalon, Original Hole
10/2/2017	12,480.0	12,481.0	2.0	2	Avalon, Original Hole
10/2/2017	12,495.0	12,496.0	3.0	3	Avalon, Original Hole
10/2/2017	12,508.0	12,509.0	3.0	3	Avalon, Original Hole
10/2/2017	12,522.0	12,523.0	3.0	3	Avalon, Original Hole
10/2/2017	12,538.0	12,539.0	3.0	3	Avalon, Original Hole
10/2/2017	12,550.0	12,551.0	3.0	3	Avalon, Original Hole
10/2/2017	12,564.0	12,565.0	4.0	4	Avalon, Original Hole
10/2/2017	12,578.0	12,579.0	5.0	5	Avalon, Original Hole
10/1/2017	12,592.0	12,593.0	2.0	2	Avalon, Original Hole
10/1/2017	12,620.0	12,621.0	2.0	2	Avalon, Original Hole
10/1/2017	12,634.0	12,635.0	2.0	2	Avalon, Original Hole
10/1/2017	12,648.0	12,649.0	2.0	2	Avalon, Original Hole
10/1/2017	12,662.0	12,663.0	2.0	2	Avalon, Original Hole
10/1/2017	12,676.0	12,677.0	2.0	2	Avalon, Original Hole
10/1/2017	12,690.0	12,691.0	3.0	3	Avalon, Original Hole
10/1/2017	12,704.0	12,705.0	3.0	3	Avalon, Original Hole
10/1/2017	12,718.0	12,719.0	3.0	3	Avalon, Original Hole
10/1/2017	12,732.0	12,733.0	3.0	3	Avalon, Original Hole
10/1/2017	12,746.0	12,747.0	3.0	3	Avalon, Original Hole
10/1/2017	12,760.0	12,761.0	4.0	4	Avalon, Original Hole
10/1/2017	12,774.0	12,775.0	5.0	5	Avalon, Original Hole
10/1/2017	12,984.0	12,985.0	2.0	2	Avalon, Original Hole
10/1/2017	12,998.0	12,999.0	2.0	2	Avalon, Original Hole
10/1/2017	13,012.0	13,013.0	2.0	2	Avalon, Original Hole
10/1/2017	13,026.0	13,027.0	2.0	2	Avalon, Original Hole
10/1/2017	13,040.0	13,041.0	2.0	2	Avalon, Original Hole
10/1/2017	13,054.0	13,055.0	2.0	2	Avalon, Original Hole
10/1/2017	13,068.0	13,069.0	2.0	2	Avalon, Original Hole
10/1/2017	13,082.0	13,083.0	3.0	3	Avalon, Original Hole
10/1/2017	13,096.0	13,097.0	3.0	3	Avalon, Original Hole
10/1/2017	13,110.0	13,111.0	3.0	3	Avalon, Original Hole
10/1/2017	13,124.0	13,125.0	3.0	3	Avalon, Original Hole
10/1/2017	13,138.0	13,139.0	3.0	3	Avalon, Original Hole





# Wellbore Schematic

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent
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Perforations					
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
10/1/2017	13,152.0	13,153.0	4.0	4	Avalon, Original Hole
10/1/2017	13,166.0	13,167.0	5.0	5	Avalon, Original Hole
9/30/2017	13,180.0	13,181.0	2.0	2	Avalon, Original Hole
9/30/2017	13,194.0	13,195.0	2.0	2	Avalon, Original Hole
9/30/2017	13,210.0	13,211.0	2.0	2	Avalon, Original Hole
9/30/2017	13,222.0	13,223.0	2.0	2	Avalon, Original Hole
9/30/2017	13,236.0	13,237.0	2.0	2	Avalon, Original Hole
9/30/2017	13,250.0	13,251.0	2.0	2	Avalon, Original Hole
9/30/2017	13,264.0	13,265.0	2.0	2	Avalon, Original Hole
9/30/2017	13,278.0	13,279.0	3.0	3	Avalon, Original Hole
9/30/2017	13,292.0	13,293.0	3.0	3	Avalon, Original Hole
9/30/2017	13,306.0	13,307.0	3.0	3	Avalon, Original Hole
9/30/2017	13,320.0	13,321.0	3.0	3	Avalon, Original Hole
9/30/2017	13,334.0	13,335.0	3.0	3	Avalon, Original Hole
9/30/2017	13,348.0	13,349.0	4.0	4	Avalon, Original Hole
9/30/2017	13,360.0	13,361.0	5.0	5	Avalon, Original Hole
9/29/2017	13,376.0	13,377.0	2.0	2	Avalon, Original Hole
9/29/2017	13,390.0	13,391.0	2.0	2	Avalon, Original Hole
9/29/2017	13,404.0	13,405.0	2.0	2	Avalon, Original Hole
9/29/2017	13,418.0	13,419.0	2.0	2	Avalon, Original Hole
9/29/2017	13,432.0	13,433.0	2.0	2	Avalon, Original Hole
9/29/2017	13,446.0	13,447.0	2.0	2	Avalon, Original Hole
9/29/2017	13,460.0	13,461.0	2.0	2	Avalon, Original Hole
9/29/2017	13,474.0	13,475.0	3.0	3	Avalon, Original Hole
9/29/2017	13,488.0	13,489.0	3.0	3	Avalon, Original Hole
9/29/2017	13,502.0	13,503.0	3.0	3	Avalon, Original Hole
9/29/2017	13,516.0	13,517.0	3.0	3	Avalon, Original Hole
9/29/2017	13,530.0	13,531.0	3.0	3	Avalon, Original Hole
9/29/2017	13,544.0	13,545.0	4.0	4	Avalon, Original Hole
9/29/2017	13,558.0	13,559.0	5.0	5	Avalon, Original Hole
9/28/2017	13,572.0	13,573.0	2.0	2	Avalon, Original Hole
9/28/2017	13,586.0	13,587.0	2.0	2	Avalon, Original Hole
9/28/2017	13,600.0	13,601.0	2.0	2	Avalon, Original Hole
9/28/2017	13,614.0	13,615.0	2.0	2	Avalon, Original Hole
9/28/2017	13,628.0	13,629.0	2.0	2	Avalon, Original Hole
9/28/2017	13,642.0	13,643.0	2.0	2	Avalon, Original Hole
9/28/2017	13,656.0	13,657.0	3.0	3	Avalon, Original Hole
9/28/2017	13,670.0	13,671.0	3.0	3	Avalon, Original Hole
9/28/2017	13,684.0	13,685.0	3.0	3	Avalon, Original Hole
9/28/2017	13,698.0	13,699.0	3.0	3	Avalon, Original Hole
9/28/2017	13,712.0	13,713.0	3.0	3	Avalon, Original Hole
9/28/2017	13,726.0	13,727.0	4.0	4	Avalon, Original Hole
9/28/2017	13,740.0	13,741.0	5.0	5	Avalon, Original Hole

Other Strings			
Run Date	Pull Date	Set Depth (ftKB)	Com

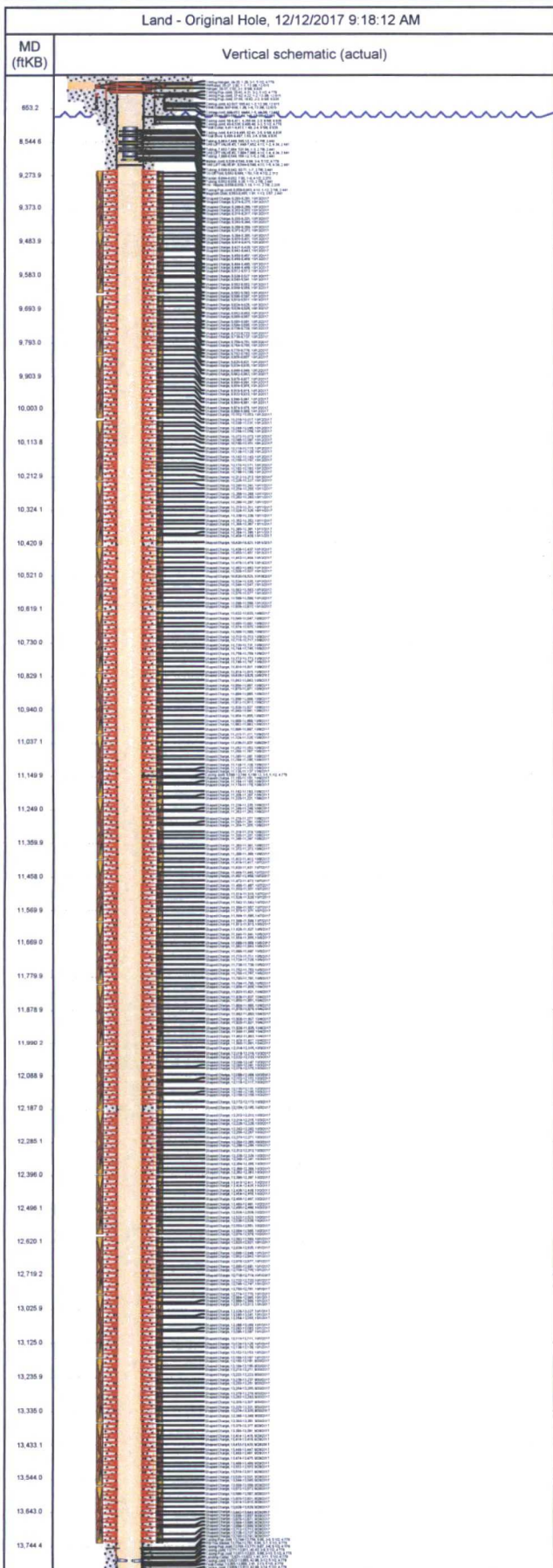
Other In Hole					
Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Packer (retrievable)	8,740.0	8,763.0	10/23/2017		
Composite Frac Plug (drop ball)	9,451.0	9,452.0	10/13/2017	10/22/2017	Stage 23
Composite Frac Plug (drop ball)	9,647.0	9,648.0	10/13/2017	10/22/2017	Stage 22
Composite Frac Plug (drop ball)	9,843.0	9,844.0	10/12/2017	10/22/2017	Stage 21
Composite Frac Plug (drop ball)	10,039.0	10,040.0	10/12/2017	10/22/2017	Stage 20
Composite Frac Plug (drop ball)	10,235.0	10,236.0	10/12/2017	10/22/2017	Stage 19





# Wellbore Schematic

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent
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Other In Hole					
Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Composite Frac Plug (drop ball)	10,431.0	10,432.0	10/11/2017	10/22/2017	Stage 18
Composite Frac Plug (drop ball)	10,618.0	10,619.0	10/10/2017	10/22/2017	Stage 17
Composite Frac Plug (drop ball)	10,823.0	10,824.0	10/9/2017	10/22/2017	Stage 16
Composite Frac Plug (drop ball)	11,019.0	11,020.0	10/9/2017	10/22/2017	Stage 15
Composite Frac Plug (drop ball)	11,215.0	11,216.0	10/8/2017	10/22/2017	Stage 14
Composite Frac Plug (drop ball)	11,411.0	11,412.0	10/8/2017	10/22/2017	Stage 13
Composite Frac Plug (drop ball)	11,607.0	11,608.0	10/7/2017	10/22/2017	Stage 12
Composite Frac Plug (drop ball)	11,803.0	11,804.0	10/5/2017	10/22/2017	Stage 11
Composite Frac Plug (drop ball)	11,999.0	12,000.0	10/4/2017	10/22/2017	Stage 10
Composite Frac Plug (drop ball)	12,195.0	12,196.0	10/3/2017	10/22/2017	Stage 9
Composite Frac Plug (drop ball)	12,391.0	12,392.0	10/3/2017	10/22/2017	Stage 8
Composite Frac Plug (drop ball)	12,587.0	12,588.0	10/2/2017	10/22/2017	Stage 7
Composite Frac Plug (drop ball)	12,783.0	12,784.0	10/1/2017	10/22/2017	Stage 6 Skipped stage 5 by mistake
Composite Frac Plug (drop ball)	13,175.0	13,176.0	10/1/2017	10/22/2017	Stage 4
Composite Frac Plug (drop ball)	13,369.0	13,370.0	9/30/2017	10/22/2017	Stage 3
Composite Frac Plug (drop ball)	13,567.0	13,568.0	9/29/2017	10/22/2017	Stage 2