

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD

Hobbs

HOBBS OCD

FORM 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.*

JAN 16 2018

SUBMIT IN TRIPLICATE - Other instructions on page 2

RECEIVED

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 6H -
9. API Well No. 30-025-43641
10. Field and Pool or Exploratory Area JENNINGS;UPR BN SPR SH
11. County or Parish, State LEA COUNTY, NM

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	2. Name of Operator CHEVRON U.S.A. INC.	Contact: DENISE PINKERTON E-Mail: leakejd@chevron.com
3a. Address 6301 DEAUVILLE BLVD MIDLAND, TX 79706	3b. Phone No. (include area code) Ph: 432-687-7375	
4. 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			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Drilling Operations
	☐ 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 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

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 Committed to AFMSS for processing by JENNIFER SANCHEZ on 12/20/2017 ()	
Name (Printed/Typed) DENISE PINKERTON	Title PERMITTING SPECIALIST
Signature (Electronic Submission)	Date 12/20/2017

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)

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

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

DRILLED NEW OIL WELL AS FOLLOWS:

04/20/2017: SPUD WELL

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

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

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

Interval Number	Link to Proppant	Proppant Mass (lb)	Cum Proppant Mass (lb)
1	100 mesh, 100 Mesh, Bulk Sand	7,587.00	8,718.00
1	100 mesh, 100 Mesh, Bulk Sand	16,049.00	24,767.00
1	100 mesh, 100 Mesh, Bulk Sand	18,797.00	43,564.00
1	100 mesh, 100 Mesh, Bulk Sand	32,064.00	75,628.00
1	100 mesh, 100 Mesh, Bulk Sand	27,765.00	103,393.00
1	40/70, PW 40/70, Bulk Sand	16,665.00	120,657.00
1	40/70, PW 40/70, Bulk Sand	33,368.00	154,025.00
1	40/70, PW 40/70, Bulk Sand	49,957.00	203,982.00
1	40/70, PW 40/70, Bulk Sand	63,966.00	267,948.00
1	40/70, PW 40/70, Bulk Sand	52,766.00	320,714.00
2	100 mesh, 100 Mesh, Bulk Sand	18,014.00	47,906.00
2	100 mesh, 100 Mesh, Bulk Sand	22,023.00	69,929.00
2	100 mesh, 100 Mesh, Bulk Sand	20,179.00	90,108.00
2	100 mesh, 100 Mesh, Bulk Sand	26,585.00	116,693.00
2	100 mesh, 100 Mesh, Bulk Sand	22,760.00	139,453.00
2	40/70, PW 40/70, Bulk Sand	36,189.00	180,870.00
2	40/70, PW 40/70, Bulk Sand	48,857.00	229,727.00
2	40/70, PW 40/70, Bulk Sand	57,400.00	287,127.00
2	40/70, PW 40/70, Bulk Sand	128,324.00	415,451.00
2	40/70, PW 40/70, Bulk Sand	47,644.00	463,095.00
3	100 mesh, 100 Mesh, Bulk Sand	4,081.00	4,558.00
3	100 mesh, 100 Mesh, Bulk Sand	8,246.00	12,804.00
3	100 mesh, 100 Mesh, Bulk Sand	9,273.00	22,077.00
3	100 mesh, 100 Mesh, Bulk Sand	17,095.00	39,172.00
3	100 mesh, 100 Mesh, Bulk Sand	13,744.00	52,916.00
3	40/70, PW 40/70, Bulk Sand	8,669.00	61,745.00
3	40/70, PW 40/70, Bulk Sand	17,628.00	79,373.00
3	40/70, PW 40/70, Bulk Sand	25,488.00	104,861.00
3	40/70, PW 40/70, Bulk Sand	36,246.00	141,107.00
3	40/70, PW 40/70, Bulk Sand	21,089.00	162,196.00
3	100 mesh, 100 Mesh, Bulk Sand	5,489.00	168,564.00
3	100 mesh, 100 Mesh, Bulk Sand	8,696.00	177,260.00
3	100 mesh, 100 Mesh, Bulk Sand	9,736.00	186,996.00
3	100 mesh, 100 Mesh, Bulk Sand	18,830.00	205,826.00
3	100 mesh, 100 Mesh, Bulk Sand	13,120.00	218,946.00
3	40/70, PW 40/70, Bulk Sand	10,512.00	229,489.00
3	40/70, PW 40/70, Bulk Sand	23,913.00	253,402.00
3	40/70, PW 40/70, Bulk Sand	21,007.00	274,409.00
3	40/70, PW 40/70, Bulk Sand	33,234.00	307,643.00
3	40/70, PW 40/70, Bulk Sand	22,295.00	329,938.00
4	100 mesh, 100 Mesh, Bulk Sand	3,788.00	4,176.00
4	100 mesh, 100 Mesh, Bulk Sand	8,193.00	12,369.00
4	100 mesh, 100 Mesh, Bulk Sand	9,446.00	21,815.00
4	100 mesh, 100 Mesh, Bulk Sand	16,452.00	38,267.00

4	100 mesh, 100 Mesh, Bulk Sand	17,804.00	56,071.00
4	40/70, PW 40/70, Bulk Sand	5,182.00	61,341.00
4	40/70, PW 40/70, Bulk Sand	16,804.00	78,145.00
4	40/70, PW 40/70, Bulk Sand	25,277.00	103,422.00
4	40/70, PW 40/70, Bulk Sand	32,432.00	135,854.00
4	40/70, PW 40/70, Bulk Sand	24,400.00	160,254.00
4	100 mesh, 100 Mesh, Bulk Sand	5,343.00	165,677.00
4	100 mesh, 100 Mesh, Bulk Sand	7,120.00	172,797.00
4	100 mesh, 100 Mesh, Bulk Sand	10,253.00	183,050.00
4	100 mesh, 100 Mesh, Bulk Sand	16,049.00	199,099.00
4	100 mesh, 100 Mesh, Bulk Sand	16,459.00	215,558.00
4	40/70, PW 40/70, Bulk Sand	7,051.00	222,628.00
4	40/70, PW 40/70, Bulk Sand	17,245.00	239,873.00
4	40/70, PW 40/70, Bulk Sand	25,296.00	265,169.00
4	40/70, PW 40/70, Bulk Sand	31,287.00	296,456.00
4	40/70, PW 40/70, Bulk Sand	31,564.00	328,020.00
6	100 mesh, 100 Mesh, Bulk Sand	4,673.00	5,338.00
6	100 mesh, 100 Mesh, Bulk Sand	8,304.00	13,642.00
6	100 mesh, 100 Mesh, Bulk Sand	7,711.00	21,353.00
6	100 mesh, 100 Mesh, Bulk Sand	13,790.00	35,143.00
6	100 mesh, 100 Mesh, Bulk Sand	16,057.00	51,200.00
6	40/70, PW 40/70, Bulk Sand	8,757.00	60,059.00
6	40/70, PW 40/70, Bulk Sand	17,329.00	77,388.00
6	40/70, PW 40/70, Bulk Sand	23,678.00	101,066.00
6	40/70, PW 40/70, Bulk Sand	31,763.00	132,829.00
6	40/70, PW 40/70, Bulk Sand	31,979.00	164,808.00
6	100 mesh, 100 Mesh, Bulk Sand	5,433.00	171,138.00
6	100 mesh, 100 Mesh, Bulk Sand	8,960.00	180,098.00
6	100 mesh, 100 Mesh, Bulk Sand	9,475.00	189,573.00
6	100 mesh, 100 Mesh, Bulk Sand	16,174.00	205,747.00
6	100 mesh, 100 Mesh, Bulk Sand	542	206,289.00
6	40/70, PW 40/70, Bulk Sand	9,020.00	215,309.00
6	40/70, PW 40/70, Bulk Sand	17,608.00	232,917.00
6	40/70, PW 40/70, Bulk Sand	27,077.00	259,994.00
6	40/70, PW 40/70, Bulk Sand	36,176.00	296,170.00
6	40/70, PW 40/70, Bulk Sand	31,752.00	327,922.00
7	100 mesh, 100 Mesh, Bulk Sand	3,544.00	4,035.00
7	100 mesh, 100 Mesh, Bulk Sand	8,260.00	12,295.00
7	100 mesh, 100 Mesh, Bulk Sand	9,528.00	21,823.00
7	100 mesh, 100 Mesh, Bulk Sand	16,297.00	38,120.00
7	100 mesh, 100 Mesh, Bulk Sand	19,344.00	57,464.00
7	40/70, PW 40/70, Bulk Sand	6,834.00	64,587.00
7	40/70, PW 40/70, Bulk Sand	17,175.00	81,762.00
7	40/70, PW 40/70, Bulk Sand	24,584.00	106,346.00
7	40/70, PW 40/70, Bulk Sand	32,451.00	138,797.00
7	40/70, PW 40/70, Bulk Sand	32,575.00	171,372.00
7	100 mesh, 100 Mesh, Bulk Sand	2,547.00	174,574.00

7	100 mesh, 100 Mesh, Bulk Sand	8,220.00	182,794.00
7	100 mesh, 100 Mesh, Bulk Sand	9,620.00	192,414.00
7	100 mesh, 100 Mesh, Bulk Sand	16,199.00	208,613.00
7	100 mesh, 100 Mesh, Bulk Sand	19,139.00	227,752.00
7	40/70, PW 40/70, Bulk Sand	7,291.00	235,079.00
7	40/70, PW 40/70, Bulk Sand	17,067.00	252,146.00
7	40/70, PW 40/70, Bulk Sand	25,294.00	277,440.00
7	40/70, PW 40/70, Bulk Sand	32,476.00	309,916.00
7	40/70, PW 40/70, Bulk Sand	32,592.00	342,508.00
8	100 mesh, 100 Mesh, Bulk Sand	2,611.00	3,139.00
8	100 mesh, 100 Mesh, Bulk Sand	7,152.00	10,291.00
8	100 mesh, 100 Mesh, Bulk Sand	8,026.00	18,317.00
8	100 mesh, 100 Mesh, Bulk Sand	13,774.00	32,091.00
8	100 mesh, 100 Mesh, Bulk Sand	16,700.00	48,791.00
8	40/70, PW 40/70, Bulk Sand	9,991.00	59,714.00
8	40/70, PW 40/70, Bulk Sand	18,377.00	78,091.00
8	40/70, PW 40/70, Bulk Sand	26,464.00	104,555.00
8	40/70, PW 40/70, Bulk Sand	35,310.00	139,865.00
8	40/70, PW 40/70, Bulk Sand	30,546.00	170,411.00
8	100 mesh, 100 Mesh, Bulk Sand	4,476.00	175,156.00
8	100 mesh, 100 Mesh, Bulk Sand	9,218.00	184,374.00
8	100 mesh, 100 Mesh, Bulk Sand	9,760.00	194,134.00
8	100 mesh, 100 Mesh, Bulk Sand	16,790.00	210,924.00
8	100 mesh, 100 Mesh, Bulk Sand	17,777.00	228,701.00
8	40/70, PW 40/70, Bulk Sand	9,168.00	237,869.00
8	40/70, PW 40/70, Bulk Sand	16,763.00	254,632.00
8	40/70, PW 40/70, Bulk Sand	25,573.00	280,205.00
8	40/70, PW 40/70, Bulk Sand	31,704.00	311,909.00
8	40/70, PW 40/70, Bulk Sand	30,807.00	342,716.00
9	100 mesh, 100 Mesh, Bulk Sand	4,490.00	4,490.00
9	100 mesh, 100 Mesh, Bulk Sand	7,865.00	12,355.00
9	100 mesh, 100 Mesh, Bulk Sand	9,464.00	21,819.00
9	100 mesh, 100 Mesh, Bulk Sand	17,461.00	39,280.00
9	100 mesh, 100 Mesh, Bulk Sand	14,892.00	54,172.00
9	40/70, PW 40/70, Bulk Sand	10,314.00	64,596.00
9	40/70, PW 40/70, Bulk Sand	17,139.00	81,735.00
9	40/70, PW 40/70, Bulk Sand	24,821.00	106,556.00
9	40/70, PW 40/70, Bulk Sand	32,361.00	138,917.00
9	40/70, PW 40/70, Bulk Sand	32,766.00	171,683.00
9	100 mesh, 100 Mesh, Bulk Sand	2,910.00	174,609.00
9	100 mesh, 100 Mesh, Bulk Sand	8,273.00	182,882.00
9	100 mesh, 100 Mesh, Bulk Sand	9,551.00	192,433.00
9	100 mesh, 100 Mesh, Bulk Sand	16,324.00	208,757.00
9	100 mesh, 100 Mesh, Bulk Sand	18,745.00	227,502.00
9	40/70, PW 40/70, Bulk Sand	7,632.00	235,161.00
9	40/70, PW 40/70, Bulk Sand	17,130.00	252,291.00
9	40/70, PW 40/70, Bulk Sand	24,689.00	276,980.00

9	40/70, PW 40/70, Bulk Sand	33,210.00	310,190.00
9	40/70, PW 40/70, Bulk Sand	31,549.00	341,739.00
10	100 mesh, 100 Mesh, Bulk Sand	4,464.00	5,653.00
10	100 mesh, 100 Mesh, Bulk Sand	8,077.00	13,730.00
10	100 mesh, 100 Mesh, Bulk Sand	9,941.00	23,671.00
10	100 mesh, 100 Mesh, Bulk Sand	15,296.00	38,967.00
10	100 mesh, 100 Mesh, Bulk Sand	20,669.00	59,636.00
10	40/70, PW 40/70, Bulk Sand	8,133.00	67,769.00
10	40/70, PW 40/70, Bulk Sand	16,556.00	84,325.00
10	40/70, PW 40/70, Bulk Sand	24,593.00	108,918.00
10	40/70, PW 40/70, Bulk Sand	32,184.00	141,102.00
10	40/70, PW 40/70, Bulk Sand	30,305.00	171,407.00
10	100 mesh, 100 Mesh, Bulk Sand	4,710.00	176,696.00
10	100 mesh, 100 Mesh, Bulk Sand	9,461.00	186,157.00
10	100 mesh, 100 Mesh, Bulk Sand	7,875.00	194,032.00
10	100 mesh, 100 Mesh, Bulk Sand	6,719.00	200,751.00
10	100 mesh, 100 Mesh, Bulk Sand	20,390.00	221,141.00
10	40/70, PW 40/70, Bulk Sand	9,393.00	231,113.00
10	40/70, PW 40/70, Bulk Sand	17,877.00	248,990.00
10	40/70, PW 40/70, Bulk Sand	28,362.00	277,352.00
10	40/70, PW 40/70, Bulk Sand	27,055.00	304,407.00
10	40/70, PW 40/70, Bulk Sand	27,434.00	331,841.00
11	100 mesh, 100 Mesh, Bulk Sand	4,670.00	4,694.00
11	100 mesh, 100 Mesh, Bulk Sand	7,632.00	12,326.00
11	100 mesh, 100 Mesh, Bulk Sand	10,125.00	22,451.00
11	100 mesh, 100 Mesh, Bulk Sand	15,748.00	38,199.00
11	100 mesh, 100 Mesh, Bulk Sand	18,169.00	56,368.00
11	40/70, PW 40/70, Bulk Sand	8,193.00	64,611.00
11	40/70, PW 40/70, Bulk Sand	17,100.00	81,711.00
11	40/70, PW 40/70, Bulk Sand	24,672.00	106,383.00
11	40/70, PW 40/70, Bulk Sand	32,258.00	138,641.00
11	40/70, PW 40/70, Bulk Sand	32,059.00	170,700.00
11	100 mesh, 100 Mesh, Bulk Sand	3,808.00	174,603.00
11	100 mesh, 100 Mesh, Bulk Sand	8,241.00	182,844.00
11	100 mesh, 100 Mesh, Bulk Sand	9,520.00	192,364.00
11	100 mesh, 100 Mesh, Bulk Sand	16,807.00	209,171.00
11	100 mesh, 100 Mesh, Bulk Sand	16,020.00	225,191.00
11	40/70, PW 40/70, Bulk Sand	9,384.00	234,593.00
11	40/70, PW 40/70, Bulk Sand	17,571.00	252,164.00
11	40/70, PW 40/70, Bulk Sand	24,913.00	277,077.00
11	40/70, PW 40/70, Bulk Sand	32,122.00	309,199.00
11	40/70, PW 40/70, Bulk Sand	33,166.00	342,365.00
12	100 mesh, 100 Mesh, Bulk Sand	4,273.00	4,293.00
12	100 mesh, 100 Mesh, Bulk Sand	8,164.00	12,457.00
12	100 mesh, 100 Mesh, Bulk Sand	10,111.00	22,568.00
12	100 mesh, 100 Mesh, Bulk Sand	15,766.00	38,334.00
12	100 mesh, 100 Mesh, Bulk Sand	17,545.00	55,879.00

12	40/70, PW 40/70, Bulk Sand	8,077.00	63,982.00
12	40/70, PW 40/70, Bulk Sand	17,001.00	80,983.00
12	40/70, PW 40/70, Bulk Sand	24,997.00	105,980.00
12	40/70, PW 40/70, Bulk Sand	32,678.00	138,658.00
12	40/70, PW 40/70, Bulk Sand	31,263.00	169,921.00
12	100 mesh, 100 Mesh, Bulk Sand	4,008.00	173,929.00
12	100 mesh, 100 Mesh, Bulk Sand	8,435.00	182,364.00
12	100 mesh, 100 Mesh, Bulk Sand	9,674.00	192,038.00
12	100 mesh, 100 Mesh, Bulk Sand	16,619.00	208,657.00
12	100 mesh, 100 Mesh, Bulk Sand	15,889.00	224,546.00
12	40/70, PW 40/70, Bulk Sand	8,833.00	233,415.00
12	40/70, PW 40/70, Bulk Sand	18,418.00	251,833.00
12	40/70, PW 40/70, Bulk Sand	26,198.00	278,031.00
12	40/70, PW 40/70, Bulk Sand	33,596.00	311,627.00
12	40/70, PW 40/70, Bulk Sand	27,102.00	338,729.00
13	100 mesh, 100 Mesh, Bulk Sand	4,064.00	4,122.00
13	100 mesh, 100 Mesh, Bulk Sand	8,216.00	12,338.00
13	100 mesh, 100 Mesh, Bulk Sand	9,538.00	21,876.00
13	100 mesh, 100 Mesh, Bulk Sand	16,405.00	38,281.00
13	100 mesh, 100 Mesh, Bulk Sand	18,115.00	56,396.00
13	40/70, PW 40/70, Bulk Sand	7,988.00	64,584.00
13	40/70, PW 40/70, Bulk Sand	17,232.00	81,816.00
13	40/70, PW 40/70, Bulk Sand	24,660.00	106,476.00
13	40/70, PW 40/70, Bulk Sand	32,156.00	138,632.00
13	40/70, PW 40/70, Bulk Sand	32,315.00	170,947.00
13	100 mesh, 100 Mesh, Bulk Sand	3,885.00	175,084.00
13	100 mesh, 100 Mesh, Bulk Sand	8,650.00	183,734.00
13	100 mesh, 100 Mesh, Bulk Sand	8,666.00	192,400.00
13	100 mesh, 100 Mesh, Bulk Sand	18,124.00	210,524.00
13	100 mesh, 100 Mesh, Bulk Sand	16,407.00	226,931.00
13	40/70, PW 40/70, Bulk Sand	7,873.00	234,890.00
13	40/70, PW 40/70, Bulk Sand	17,353.00	252,243.00
13	40/70, PW 40/70, Bulk Sand	24,658.00	276,901.00
13	40/70, PW 40/70, Bulk Sand	32,236.00	309,137.00
13	40/70, PW 40/70, Bulk Sand	32,295.00	341,432.00
14	100 mesh, 100 Mesh, Bulk Sand	4,739.00	4,796.00
14	100 mesh, 100 Mesh, Bulk Sand	8,357.00	13,153.00
14	100 mesh, 100 Mesh, Bulk Sand	9,362.00	22,515.00
14	100 mesh, 100 Mesh, Bulk Sand	18,790.00	41,305.00
14	100 mesh, 100 Mesh, Bulk Sand	13,999.00	55,304.00
14	40/70, PW 40/70, Bulk Sand	8,816.00	64,139.00
14	40/70, PW 40/70, Bulk Sand	15,081.00	79,220.00
14	40/70, PW 40/70, Bulk Sand	24,605.00	103,825.00
14	40/70, PW 40/70, Bulk Sand	31,926.00	135,751.00
14	40/70, PW 40/70, Bulk Sand	30,682.00	166,433.00
14	100 mesh, 100 Mesh, Bulk Sand	3,705.00	170,651.00
14	100 mesh, 100 Mesh, Bulk Sand	8,329.00	178,980.00

14	100 mesh, 100 Mesh, Bulk Sand	9,290.00	188,270.00
14	100 mesh, 100 Mesh, Bulk Sand	16,081.00	204,351.00
14	100 mesh, 100 Mesh, Bulk Sand	16,998.00	221,349.00
14	40/70, PW 40/70, Bulk Sand	9,168.00	230,694.00
14	40/70, PW 40/70, Bulk Sand	16,866.00	247,560.00
14	40/70, PW 40/70, Bulk Sand	24,322.00	271,882.00
14	40/70, PW 40/70, Bulk Sand	31,923.00	303,805.00
14	40/70, PW 40/70, Bulk Sand	34,646.00	338,451.00
15	100 mesh, 100 Mesh, Bulk Sand	4,193.00	4,281.00
15	100 mesh, 100 Mesh, Bulk Sand	8,069.00	12,350.00
15	100 mesh, 100 Mesh, Bulk Sand	9,495.00	21,845.00
15	100 mesh, 100 Mesh, Bulk Sand	16,304.00	38,149.00
15	100 mesh, 100 Mesh, Bulk Sand	18,418.00	56,567.00
15	40/70, PW 40/70, Bulk Sand	7,996.00	64,612.00
15	40/70, PW 40/70, Bulk Sand	17,524.00	82,136.00
15	40/70, PW 40/70, Bulk Sand	24,436.00	106,572.00
15	40/70, PW 40/70, Bulk Sand	32,082.00	138,654.00
15	40/70, PW 40/70, Bulk Sand	32,068.00	170,722.00
15	100 mesh, 100 Mesh, Bulk Sand	3,727.00	174,554.00
15	100 mesh, 100 Mesh, Bulk Sand	8,220.00	182,774.00
15	100 mesh, 100 Mesh, Bulk Sand	9,508.00	192,282.00
15	100 mesh, 100 Mesh, Bulk Sand	16,558.00	208,840.00
15	100 mesh, 100 Mesh, Bulk Sand	18,054.00	226,894.00
15	40/70, PW 40/70, Bulk Sand	8,243.00	235,169.00
15	40/70, PW 40/70, Bulk Sand	17,052.00	252,221.00
15	40/70, PW 40/70, Bulk Sand	24,788.00	277,009.00
15	40/70, PW 40/70, Bulk Sand	32,066.00	309,075.00
15	40/70, PW 40/70, Bulk Sand	32,095.00	341,170.00
16	100 mesh, 100 Mesh, Bulk Sand	4,245.00	4,429.00
16	100 mesh, 100 Mesh, Bulk Sand	6,232.00	10,661.00
16	100 mesh, 100 Mesh, Bulk Sand	11,109.00	21,770.00
16	100 mesh, 100 Mesh, Bulk Sand	17,278.00	39,048.00
16	100 mesh, 100 Mesh, Bulk Sand	17,379.00	56,427.00
16	40/70, PW 40/70, Bulk Sand	8,302.00	64,801.00
16	40/70, PW 40/70, Bulk Sand	17,541.00	82,342.00
16	40/70, PW 40/70, Bulk Sand	25,316.00	107,658.00
16	40/70, PW 40/70, Bulk Sand	32,886.00	140,544.00
16	40/70, PW 40/70, Bulk Sand	33,134.00	173,678.00
16	100 mesh, 100 Mesh, Bulk Sand	4,342.00	178,436.00
16	100 mesh, 100 Mesh, Bulk Sand	8,310.00	186,746.00
16	100 mesh, 100 Mesh, Bulk Sand	9,437.00	196,183.00
16	100 mesh, 100 Mesh, Bulk Sand	15,972.00	212,155.00
16	100 mesh, 100 Mesh, Bulk Sand	15,103.00	227,258.00
16	40/70, PW 40/70, Bulk Sand	8,806.00	236,074.00
16	40/70, PW 40/70, Bulk Sand	16,938.00	253,012.00
16	40/70, PW 40/70, Bulk Sand	25,409.00	278,421.00
16	40/70, PW 40/70, Bulk Sand	31,638.00	310,059.00

16	40/70, PW 40/70, Bulk Sand	31,150.00	341,209.00
17	100 mesh, 100 Mesh, Bulk Sand	4,411.00	4,947.00
17	100 mesh, 100 Mesh, Bulk Sand	8,137.00	13,084.00
17	100 mesh, 100 Mesh, Bulk Sand	9,035.00	22,119.00
17	100 mesh, 100 Mesh, Bulk Sand	16,096.00	38,215.00
17	100 mesh, 100 Mesh, Bulk Sand	19,955.00	58,170.00
17	40/70, PW 40/70, Bulk Sand	6,981.00	65,186.00
17	40/70, PW 40/70, Bulk Sand	16,548.00	81,734.00
17	40/70, PW 40/70, Bulk Sand	24,864.00	106,598.00
17	40/70, PW 40/70, Bulk Sand	32,050.00	138,648.00
17	40/70, PW 40/70, Bulk Sand	32,116.00	170,764.00
17	100 mesh, 100 Mesh, Bulk Sand	4,757.00	175,658.00
17	100 mesh, 100 Mesh, Bulk Sand	7,312.00	182,970.00
17	100 mesh, 100 Mesh, Bulk Sand	9,572.00	192,542.00
17	100 mesh, 100 Mesh, Bulk Sand	16,152.00	208,694.00
17	100 mesh, 100 Mesh, Bulk Sand	17,877.00	226,571.00
17	40/70, PW 40/70, Bulk Sand	8,760.00	235,430.00
17	40/70, PW 40/70, Bulk Sand	16,786.00	252,216.00
17	40/70, PW 40/70, Bulk Sand	25,083.00	277,299.00
17	40/70, PW 40/70, Bulk Sand	33,080.00	310,379.00
17	40/70, PW 40/70, Bulk Sand	32,103.00	342,482.00
18	100 mesh, 100 Mesh, Bulk Sand	5,096.00	5,144.00
18	100 mesh, 100 Mesh, Bulk Sand	7,627.00	12,771.00
18	100 mesh, 100 Mesh, Bulk Sand	9,185.00	21,956.00
18	100 mesh, 100 Mesh, Bulk Sand	16,947.00	38,903.00
18	100 mesh, 100 Mesh, Bulk Sand	18,267.00	57,170.00
18	40/70, PW 40/70, Bulk Sand	7,419.00	64,605.00
18	40/70, PW 40/70, Bulk Sand	17,341.00	81,946.00
18	40/70, PW 40/70, Bulk Sand	24,458.00	106,404.00
18	40/70, PW 40/70, Bulk Sand	32,713.00	139,117.00
18	40/70, PW 40/70, Bulk Sand	30,950.00	170,067.00
18	100 mesh, 100 Mesh, Bulk Sand	4,250.00	174,619.00
18	100 mesh, 100 Mesh, Bulk Sand	8,201.00	182,820.00
18	100 mesh, 100 Mesh, Bulk Sand	9,536.00	192,356.00
18	100 mesh, 100 Mesh, Bulk Sand	16,321.00	208,677.00
18	100 mesh, 100 Mesh, Bulk Sand	19,223.00	227,900.00
18	40/70, PW 40/70, Bulk Sand	7,238.00	235,138.00
18	40/70, PW 40/70, Bulk Sand	17,176.00	252,314.00
18	40/70, PW 40/70, Bulk Sand	25,819.00	278,133.00
18	40/70, PW 40/70, Bulk Sand	31,809.00	309,942.00
18	40/70, PW 40/70, Bulk Sand	30,474.00	340,416.00
19	100 mesh, 100 Mesh, Bulk Sand	4,643.00	4,978.00
19	100 mesh, 100 Mesh, Bulk Sand	7,314.00	12,292.00
19	100 mesh, 100 Mesh, Bulk Sand	9,991.00	22,283.00
19	100 mesh, 100 Mesh, Bulk Sand	15,911.00	38,194.00
19	100 mesh, 100 Mesh, Bulk Sand	16,940.00	55,134.00
19	40/70, PW 40/70, Bulk Sand	9,503.00	64,640.00

19	40/70, PW 40/70, Bulk Sand	17,412.00	82,052.00
19	40/70, PW 40/70, Bulk Sand	24,433.00	106,485.00
19	40/70, PW 40/70, Bulk Sand	32,245.00	138,730.00
19	40/70, PW 40/70, Bulk Sand	32,978.00	171,708.00
19	100 mesh, 100 Mesh, Bulk Sand	2,580.00	174,730.00
19	100 mesh, 100 Mesh, Bulk Sand	8,105.00	182,835.00
19	100 mesh, 100 Mesh, Bulk Sand	9,544.00	192,379.00
19	100 mesh, 100 Mesh, Bulk Sand	16,986.00	209,365.00
19	100 mesh, 100 Mesh, Bulk Sand	17,607.00	226,972.00
19	40/70, PW 40/70, Bulk Sand	8,046.00	235,126.00
19	40/70, PW 40/70, Bulk Sand	17,105.00	252,231.00
19	40/70, PW 40/70, Bulk Sand	24,753.00	276,984.00
19	40/70, PW 40/70, Bulk Sand	32,298.00	309,282.00
19	40/70, PW 40/70, Bulk Sand	31,219.00	340,501.00
20	100 mesh, 100 Mesh, Bulk Sand	3,687.00	4,093.00
20	100 mesh, 100 Mesh, Bulk Sand	8,253.00	12,346.00
20	100 mesh, 100 Mesh, Bulk Sand	9,531.00	21,877.00
20	100 mesh, 100 Mesh, Bulk Sand	16,329.00	38,206.00
20	100 mesh, 100 Mesh, Bulk Sand	18,558.00	56,764.00
20	40/70, PW 40/70, Bulk Sand	8,138.00	64,947.00
20	40/70, PW 40/70, Bulk Sand	16,999.00	81,946.00
20	40/70, PW 40/70, Bulk Sand	25,703.00	107,649.00
20	40/70, PW 40/70, Bulk Sand	31,025.00	138,674.00
20	40/70, PW 40/70, Bulk Sand	31,775.00	170,449.00
20	100 mesh, 100 Mesh, Bulk Sand	4,157.00	174,641.00
20	100 mesh, 100 Mesh, Bulk Sand	8,222.00	182,863.00
20	100 mesh, 100 Mesh, Bulk Sand	9,471.00	192,334.00
20	100 mesh, 100 Mesh, Bulk Sand	16,374.00	208,708.00
20	100 mesh, 100 Mesh, Bulk Sand	18,833.00	227,541.00
20	40/70, PW 40/70, Bulk Sand	8,126.00	235,740.00
20	40/70, PW 40/70, Bulk Sand	16,528.00	252,268.00
20	40/70, PW 40/70, Bulk Sand	24,729.00	276,997.00
20	40/70, PW 40/70, Bulk Sand	32,386.00	309,383.00
20	40/70, PW 40/70, Bulk Sand	32,241.00	341,624.00
21	100 mesh, 100 Mesh, Bulk Sand	3,936.00	4,142.00
21	100 mesh, 100 Mesh, Bulk Sand	8,243.00	12,385.00
21	100 mesh, 100 Mesh, Bulk Sand	9,521.00	21,906.00
21	100 mesh, 100 Mesh, Bulk Sand	16,329.00	38,235.00
21	100 mesh, 100 Mesh, Bulk Sand	18,955.00	57,190.00
21	40/70, PW 40/70, Bulk Sand	7,414.00	64,630.00
21	40/70, PW 40/70, Bulk Sand	17,133.00	81,763.00
21	40/70, PW 40/70, Bulk Sand	24,742.00	106,505.00
21	40/70, PW 40/70, Bulk Sand	32,193.00	138,698.00
21	40/70, PW 40/70, Bulk Sand	32,983.00	171,681.00
21	100 mesh, 100 Mesh, Bulk Sand	3,650.00	176,020.00
21	100 mesh, 100 Mesh, Bulk Sand	7,415.00	183,435.00
21	100 mesh, 100 Mesh, Bulk Sand	8,866.00	192,301.00

21	100 mesh, 100 Mesh, Bulk Sand	16,408.00	208,709.00
21	100 mesh, 100 Mesh, Bulk Sand	18,702.00	227,411.00
21	40/70, PW 40/70, Bulk Sand	7,718.00	235,129.00
21	40/70, PW 40/70, Bulk Sand	17,106.00	252,235.00
21	40/70, PW 40/70, Bulk Sand	24,757.00	276,992.00
21	40/70, PW 40/70, Bulk Sand	32,183.00	309,175.00
21	40/70, PW 40/70, Bulk Sand	32,513.00	341,688.00
22	100 mesh, 100 Mesh, Bulk Sand	4,098.00	4,098.00
22	100 mesh, 100 Mesh, Bulk Sand	8,250.00	12,348.00
22	100 mesh, 100 Mesh, Bulk Sand	9,495.00	21,843.00
22	100 mesh, 100 Mesh, Bulk Sand	16,315.00	38,158.00
22	100 mesh, 100 Mesh, Bulk Sand	19,152.00	57,310.00
22	40/70, PW 40/70, Bulk Sand	7,673.00	65,024.00
22	40/70, PW 40/70, Bulk Sand	17,446.00	82,470.00
22	40/70, PW 40/70, Bulk Sand	24,233.00	106,703.00
22	40/70, PW 40/70, Bulk Sand	32,030.00	138,733.00
22	40/70, PW 40/70, Bulk Sand	32,278.00	171,011.00
22	100 mesh, 100 Mesh, Bulk Sand	3,434.00	174,664.00
22	100 mesh, 100 Mesh, Bulk Sand	8,193.00	182,857.00
22	100 mesh, 100 Mesh, Bulk Sand	11,676.00	194,533.00
22	100 mesh, 100 Mesh, Bulk Sand	14,952.00	209,485.00
22	100 mesh, 100 Mesh, Bulk Sand	18,263.00	227,748.00
22	40/70, PW 40/70, Bulk Sand	7,381.00	235,129.00
22	40/70, PW 40/70, Bulk Sand	17,767.00	252,896.00
22	40/70, PW 40/70, Bulk Sand	24,138.00	277,034.00
22	40/70, PW 40/70, Bulk Sand	32,281.00	309,315.00
22	40/70, PW 40/70, Bulk Sand	32,915.00	342,230.00
23	100 mesh, 100 Mesh, Bulk Sand	4,332.00	4,670.00
23	100 mesh, 100 Mesh, Bulk Sand	8,032.00	12,702.00
23	100 mesh, 100 Mesh, Bulk Sand	9,131.00	21,833.00
23	100 mesh, 100 Mesh, Bulk Sand	16,382.00	38,215.00
23	100 mesh, 100 Mesh, Bulk Sand	19,337.00	57,552.00
23	40/70, PW 40/70, Bulk Sand	7,038.00	64,608.00
23	40/70, PW 40/70, Bulk Sand	17,128.00	81,736.00
23	40/70, PW 40/70, Bulk Sand	24,691.00	106,427.00
23	40/70, PW 40/70, Bulk Sand	33,880.00	140,307.00
23	40/70, PW 40/70, Bulk Sand	31,729.00	172,036.00
23	100 mesh, 100 Mesh, Bulk Sand	4,631.00	177,372.00
23	100 mesh, 100 Mesh, Bulk Sand	6,670.00	184,042.00
23	100 mesh, 100 Mesh, Bulk Sand	8,358.00	192,400.00
23	100 mesh, 100 Mesh, Bulk Sand	16,214.00	208,614.00
23	100 mesh, 100 Mesh, Bulk Sand	18,129.00	226,743.00
23	40/70, PW 40/70, Bulk Sand	8,541.00	235,285.00
23	40/70, PW 40/70, Bulk Sand	17,964.00	253,249.00
23	40/70, PW 40/70, Bulk Sand	23,691.00	276,940.00
23	40/70, PW 40/70, Bulk Sand	32,216.00	309,156.00
23	40/70, PW 40/70, Bulk Sand	31,868.00	341,024.00

TOTAL =

7,508,028.00

District I
1675 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 391-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1281 Fax: (575) 748-9120

District III
1000 Rio Brazos Road, 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, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

"As Drilled"

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-43461	² Pool Code 97838	³ Pool Name Jennings, Upper Bone Spring, Shale
⁴ Property Code 317456	⁵ Property Name SD WE 15 FED P9	Well Number 6H
⁶ GRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3157'

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	15	26 SOUTH	32 EAST, N.M.P.M.		12'	SOUTH	1446'	EAST	LEA

11 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
B	15	26 SOUTH	32 EAST, N.M.P.M.		173'	NORTH	1351'	EAST	LEA

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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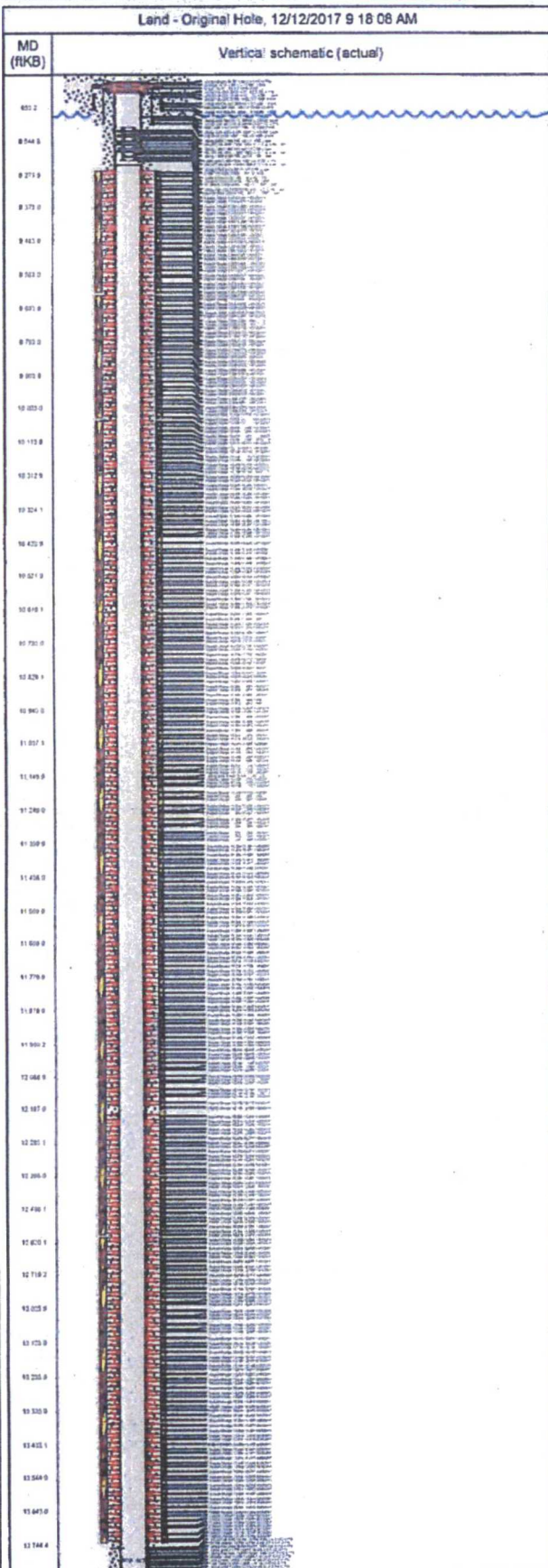
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16 AS-DRILLED BOTTOM HOLE LOCATION X= 709,230 NAD 27 Y= 382,460 LAT. 32.049698 LONG. 103.658030 X= 750,416 NAD83 Y= 382,517 LAT. 32.049823 LONG. 103.658501 SD WE 15 FED P9 6H WELL X= 709,149 NAD 27 Y= 377,296 LAT. 32.035506 LONG. 103.658395 X= 750,336 NAD83 Y= 377,353 LAT. 32.035631 LONG. 103.658865 ELEVATION +3157' NAVD 88	LAST TAKE POINT X= 709,229 NAD 27 Y= 382,291 LAT. 32.049235 LONG. 103.658036 X= 750,416 NAD83 Y= 382,349 LAT. 32.049360 LONG. 103.658507 FIRST TAKE POINT X= 709,254 NAD 27 Y= 377,800 LAT. 32.036889 LONG. 103.658044 X= 750,441 NAD83 Y= 377,857 LAT. 32.037015 LONG. 103.658514	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Denise Pinkerton</i> Date: <i>12/19/2017</i> Printed Name: <i>Denise Pinkerton</i> E-mail Address: <i>Leakid@chevron.com</i>
CORNER COORDINATES TABLE (NAD 27) A - Y=382621.59, X=707915.08 B - Y=382632.76, X=709247.41 C - Y=377273.21, X=707930.44 D - Y=377284.84, X=709262.41	"SURVEYOR CERTIFICATION" I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: <i>5-26-2016</i> Signature and Seal of Professional Surveyor: <i>Robert L. Lastrapes</i> Certificate Number: <i>23006</i>	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: <i>5-26-2016</i> Signature and Seal of Professional Surveyor: <i>Robert L. Lastrapes</i> Certificate Number: <i>23006</i>



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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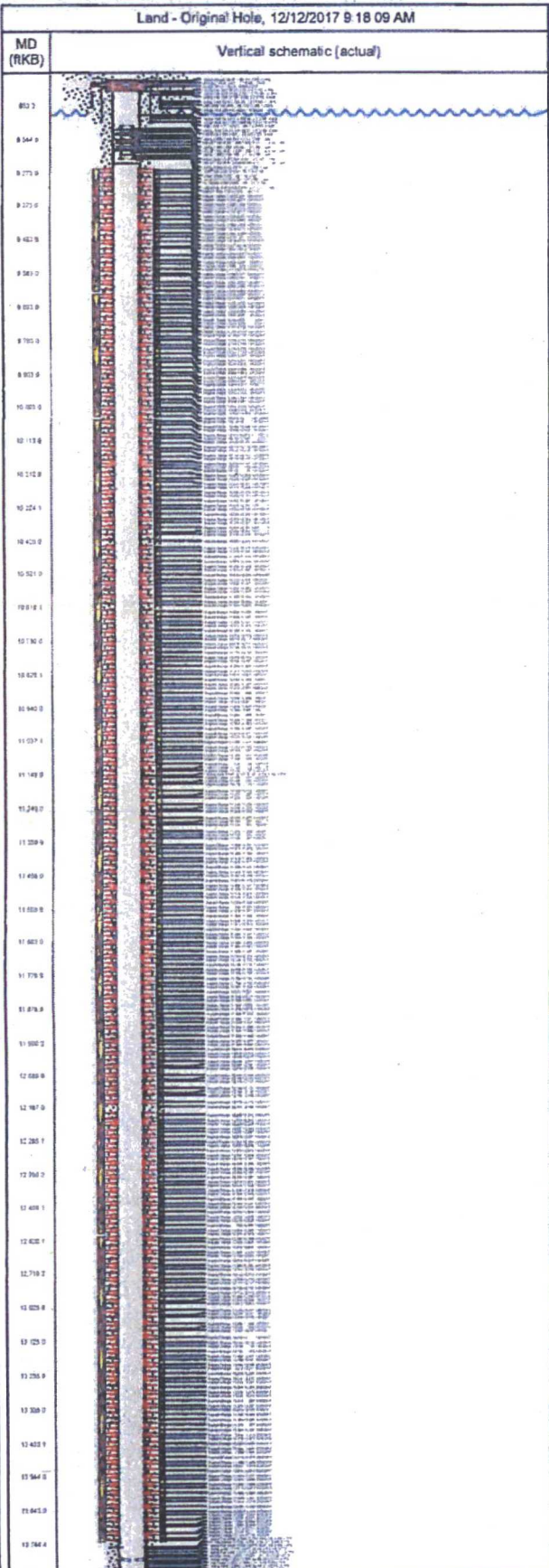


Job Details						
Job Category			Start Date		Rig/Unit End Date	
Completion			8/18/2017		10/28/2017	
Completion			11/2/2017		11/4/2017	
Casing Strings						
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (MD) (ftKB)	
Surface	13 3/8	54.50	J-55	ST&C	655	
Intermediate Casing 1	9 5/8	40.00	L-80	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	3.688			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
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Perforations					
Date	Top (RKB)	Botm (RKB)	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

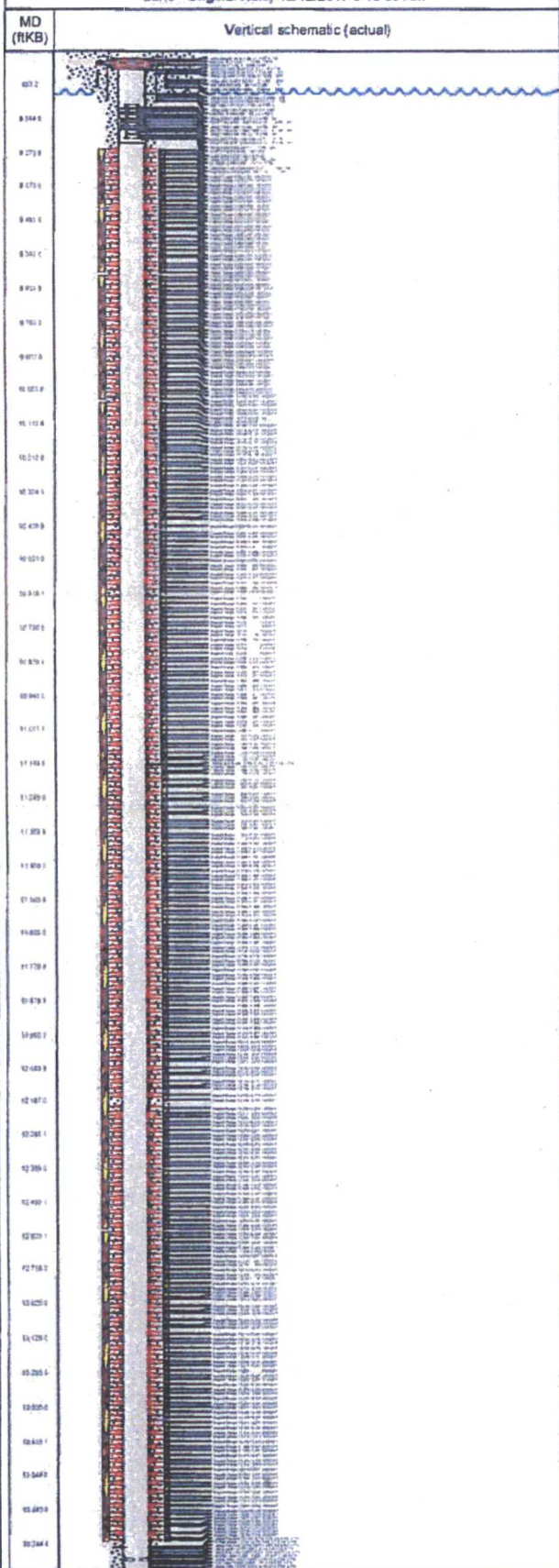
Well Name
SD WE 15 FED P96H

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)	Botm (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	11,038.0	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

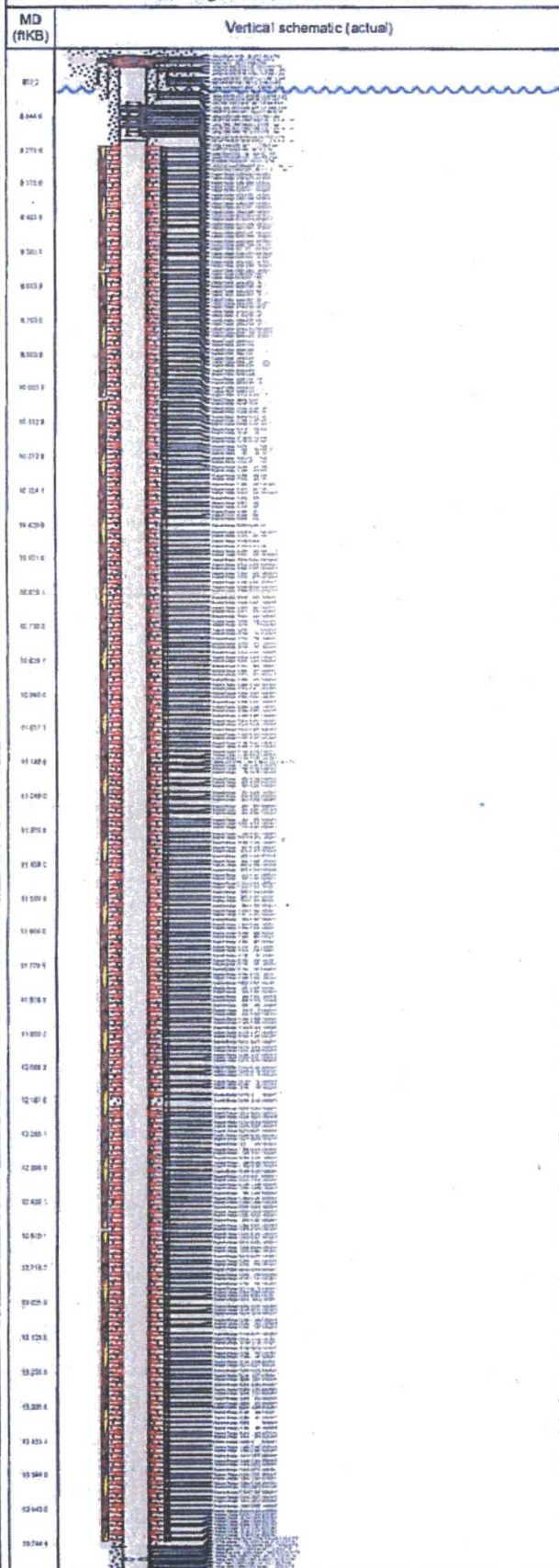
Well Name
SD WE 15 FED P9 6H

Lease
SD WE 15 FED P9

Field Name
JENNINGS

Business Unit
Mid-Continent

Land - Original Hole, 12/12/2017 9 18 10 AM



Perforations

Date	Top (ftKB)	Botm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
10/8/2017	11,318.0	11,319.0	3.0	3	Avalon, Original Hole
10/8/2017	11,330.0	11,331.0	3.0	3	Avalon, Original Hole
10/8/2017	11,348.0	11,347.0	3.0	3	Avalon, Original Hole
10/8/2017	11,360.0	11,361.0	3.0	3	Avalon, Original Hole
10/8/2017	11,372.0	11,373.0	3.0	3	Avalon, Original Hole
10/8/2017	11,388.0	11,389.0	4.0	4	Avalon, Original Hole
10/8/2017	11,402.0	11,403.0	5.0	5	Avalon, Original Hole
10/7/2017	11,416.0	11,417.0	2.0	2	Avalon, Original Hole
10/7/2017	11,430.0	11,431.0	2.0	2	Avalon, Original Hole
10/7/2017	11,444.0	11,445.0	2.0	2	Avalon, Original Hole
10/7/2017	11,457.0	11,458.0	2.0	2	Avalon, Original Hole
10/7/2017	11,472.0	11,473.0	2.0	2	Avalon, Original Hole
10/7/2017	11,486.0	11,487.0	2.0	2	Avalon, Original Hole
10/7/2017	11,500.0	11,501.0	2.0	2	Avalon, Original Hole
10/7/2017	11,514.0	11,515.0	3.0	3	Avalon, Original Hole
10/7/2017	11,528.0	11,529.0	3.0	3	Avalon, Original Hole
10/7/2017	11,542.0	11,543.0	3.0	3	Avalon, Original Hole
10/7/2017	11,556.0	11,557.0	3.0	3	Avalon, Original Hole
10/7/2017	11,570.0	11,571.0	3.0	3	Avalon, Original Hole
10/7/2017	11,584.0	11,585.0	4.0	4	Avalon, Original Hole
10/7/2017	11,598.0	11,599.0	5.0	5	Avalon, Original Hole
10/5/2017	11,612.0	11,613.0	2.0	2	Avalon, Original Hole
10/5/2017	11,626.0	11,627.0	2.0	2	Avalon, Original Hole
10/5/2017	11,640.0	11,641.0	2.0	2	Avalon, Original Hole
10/5/2017	11,654.0	11,655.0	2.0	2	Avalon, Original Hole
10/5/2017	11,668.0	11,669.0	2.0	2	Avalon, Original Hole
10/5/2017	11,682.0	11,683.0	2.0	2	Avalon, Original Hole
10/5/2017	11,696.0	11,697.0	2.0	2	Avalon, Original Hole
10/5/2017	11,710.0	11,711.0	3.0	3	Avalon, Original Hole
10/5/2017	11,724.0	11,725.0	3.0	3	Avalon, Original Hole
10/5/2017	11,738.0	11,739.0	3.0	3	Avalon, Original Hole
10/5/2017	11,752.0	11,753.0	3.0	3	Avalon, Original Hole
10/5/2017	11,766.0	11,767.0	3.0	3	Avalon, Original Hole
10/5/2017	11,780.0	11,781.0	4.0	4	Avalon, Original Hole
10/5/2017	11,794.0	11,795.0	5.0	5	Avalon, Original Hole
10/4/2017	11,808.0	11,809.0	2.0	2	Avalon, Original Hole
10/4/2017	11,820.0	11,821.0	2.0	2	Avalon, Original Hole
10/4/2017	11,836.0	11,837.0	2.0	2	Avalon, Original Hole
10/4/2017	11,850.0	11,851.0	2.0	2	Avalon, Original Hole
10/4/2017	11,864.0	11,865.0	2.0	2	Avalon, Original Hole
10/4/2017	11,878.0	11,879.0	2.0	2	Avalon, Original Hole
10/4/2017	11,892.0	11,893.0	2.0	2	Avalon, Original Hole
10/4/2017	11,906.0	11,907.0	3.0	3	Avalon, Original Hole
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

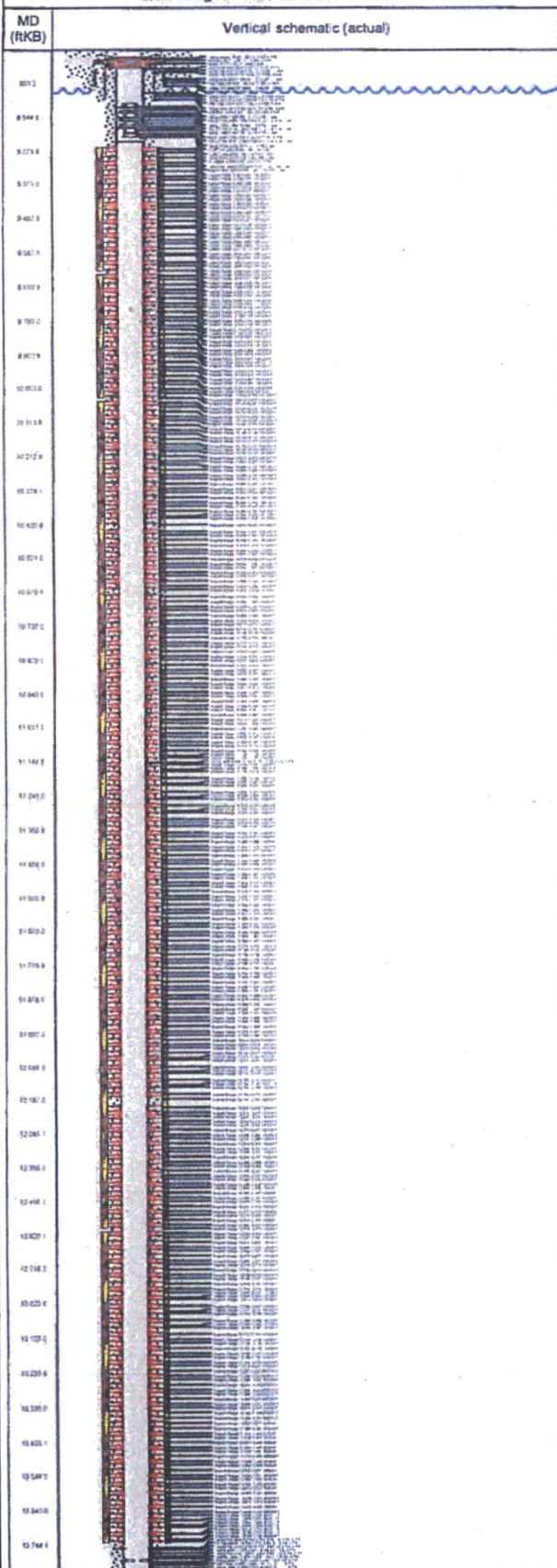
Well Name
SD WE 15 FED P9 6H

Log No
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)	Bot (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

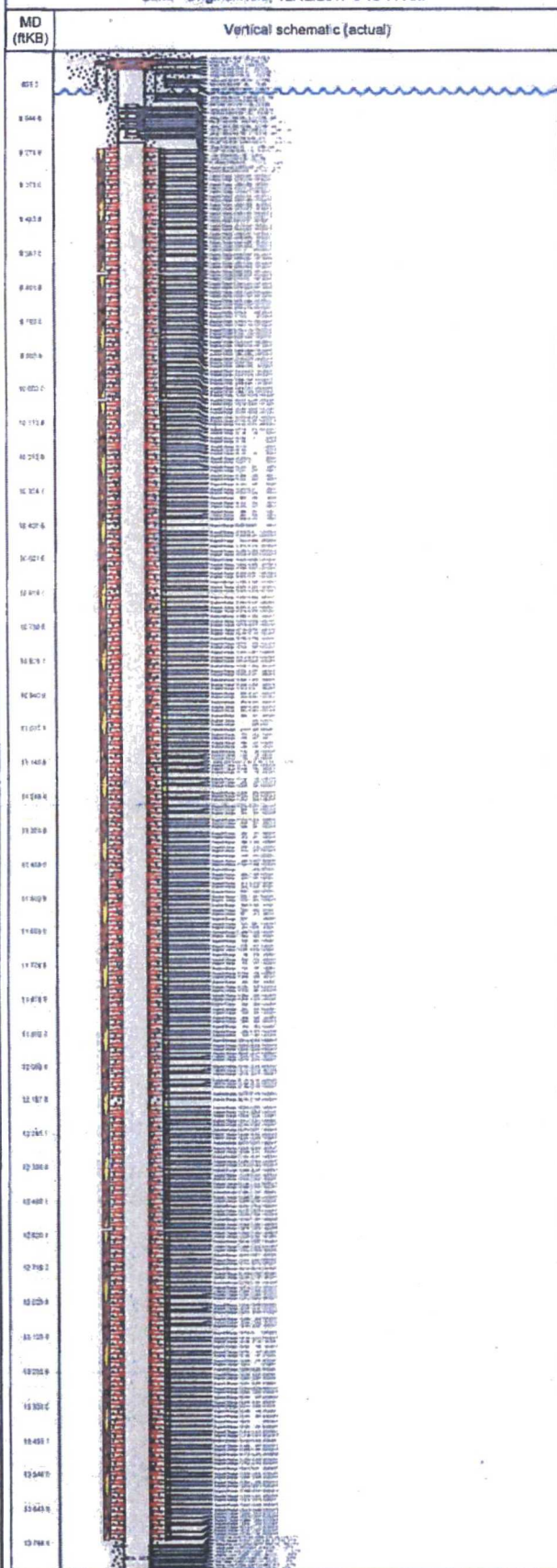
Well Name
SD WE 15 FED P9 6H

Lease
SD WE 15 FED P9

Field Name
JENNINGS

Business Unit
Mid-Continent

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



Perforations

Date	Top (ftKB)	Bot (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)	Bot (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

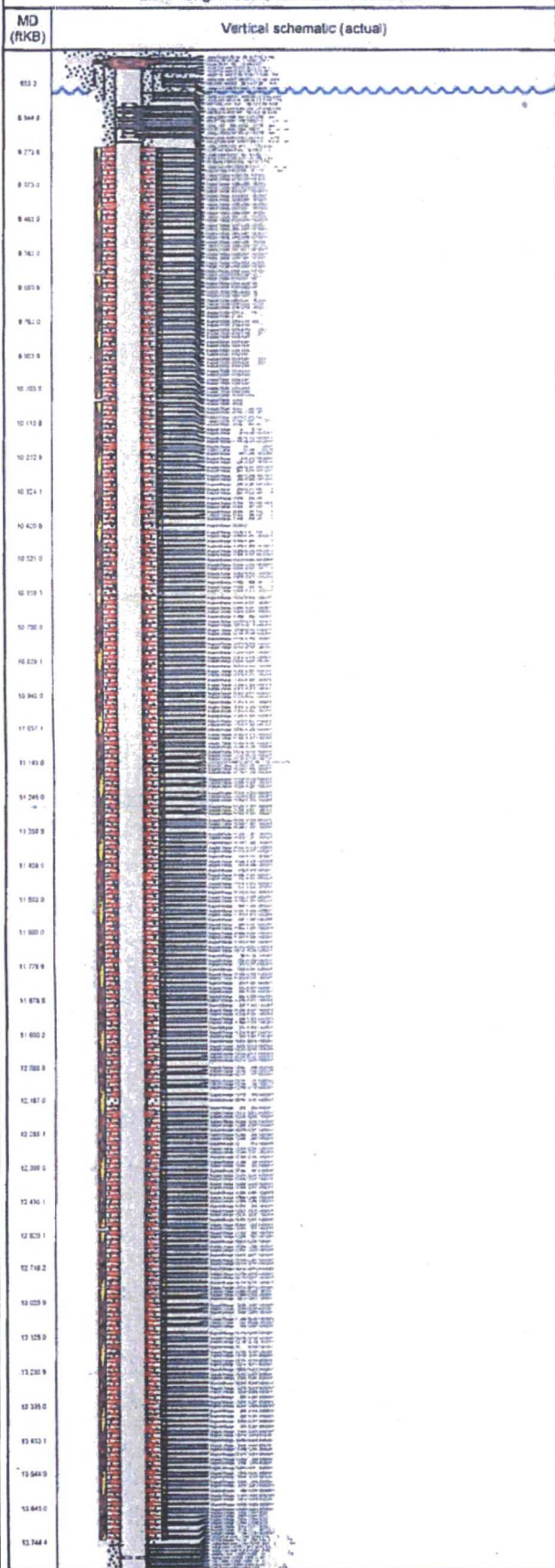
Well Name
SD WE 15 FED P9 6H

Lease
SD WE 15 FED P9

Field Name
JENNINGS

Business Unit
Mid-Continent

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



Other in Hole

Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Composite Frac Plug (drop ball)	10,431	10,432	10/11/2017	10/22/2017	Stage 18
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	10,618	10,619	10/10/2017	10/22/2017	Stage 17
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	10,823	10,824	10/9/2017	10/22/2017	Stage 16
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,019	11,020	10/9/2017	10/22/2017	Stage 15
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,215	11,216	10/8/2017	10/22/2017	Stage 14
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,411	11,412	10/8/2017	10/22/2017	Stage 13
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,607	11,608	10/7/2017	10/22/2017	Stage 12
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,803	11,804	10/5/2017	10/22/2017	Stage 11
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	11,999	12,000	10/4/2017	10/22/2017	Stage 10
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	12,195	12,196	10/3/2017	10/22/2017	Stage 9
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	12,391	12,392	10/3/2017	10/22/2017	Stage 8
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	12,587	12,588	10/2/2017	10/22/2017	Stage 7
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	12,783	12,784	10/1/2017	10/22/2017	Stage 6 Skipped stage 5 by mistake
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	13,175	13,176	10/1/2017	10/22/2017	Stage 4
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	13,369	13,370	9/30/2017	10/22/2017	Stage 3
Composite Frac Plug (drop ball)	0	0			
Composite Frac Plug (drop ball)	13,567	13,568	9/29/2017	10/22/2017	Stage 2
Composite Frac Plug (drop ball)	0	0			



Perforation Summary

Well Name SD WE 15 FED P9 GH	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8758
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (")	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/13/2017	Shaped Charge	9,260.0	9,261.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,274.0	9,275.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,288.0	9,289.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,302.0	9,303.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,316.0	9,317.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,330.0	9,331.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,343.0	9,344.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,358.0	9,359.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,372.0	9,373.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,384.0	9,385.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,400.0	9,401.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,414.0	9,415.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,427.0	9,428.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,442.0	9,443.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 23
10/13/2017	Shaped Charge	9,456.0	9,457.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,468.0	9,469.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,484.0	9,485.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,498.0	9,499.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,512.0	9,513.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,526.0	9,527.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,540.0	9,541.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,552.0	9,553.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 22



Perforation Summary

Well Name SD WE 15 FED P0 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/13/2017	Shaped Charge	9,568.0	9,569.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,582.0	9,583.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,598.0	9,597.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,610.0	9,611.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,624.0	9,625.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 22
10/13/2017	Shaped Charge	9,638.0	9,639.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 22
10/12/2017	Shaped Charge	9,652.0	9,653.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,666.0	9,667.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,680.0	9,681.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,694.0	9,695.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,708.0	9,709.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,722.0	9,723.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,736.0	9,737.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,750.0	9,751.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,764.0	9,765.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,778.0	9,779.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,792.0	9,793.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,806.0	9,807.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,820.0	9,821.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,834.0	9,835.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 21
10/12/2017	Shaped Charge	9,848.0	9,849.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,862.0	9,863.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChwNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Btm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/12/2017	Shaped Charge	9,876.0	9,877.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,890.0	9,891.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,904.0	9,905.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,918.0	9,919.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,932.0	9,933.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,946.0	9,947.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,960.0	9,961.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,974.0	9,975.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	9,988.0	9,989.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	10,002.0	10,003.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	10,016.0	10,017.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	10,030.0	10,031.0	80	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 20
10/12/2017	Shaped Charge	10,044.0	10,045.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,058.0	10,059.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,072.0	10,073.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,086.0	10,087.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,100.0	10,101.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,114.0	10,115.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,128.0	10,129.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,142.0	10,143.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,156.0	10,157.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,170.0	10,171.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 19



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (*)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/12/2017	Shaped Charge	10,182.0	10,183.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,198.0	10,199.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,212.0	10,213.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 19
10/12/2017	Shaped Charge	10,226.0	10,227.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 19
10/11/2017	Shaped Charge	10,240.0	10,241.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,254.0	10,255.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,268.0	10,269.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,282.0	10,283.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,296.0	10,297.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,310.0	10,311.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,324.0	10,325.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,338.0	10,339.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,352.0	10,353.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,366.0	10,367.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,380.0	10,381.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,394.0	10,395.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,408.0	10,409.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 18
10/11/2017	Shaped Charge	10,420.0	10,421.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 18
10/10/2017	Shaped Charge	10,436.0	10,437.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,450.0	10,451.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,463.0	10,464.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,478.0	10,479.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17



Perforation Summary

Well Name SD WE 15 FED P9 6H	License SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (")	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/10/2017	Shaped Charge	10,492.0	10,493.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,506.0	10,507.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,520.0	10,521.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,534.0	10,535.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,546.0	10,547.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,562.0	10,563.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,576.0	10,577.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,588.0	10,589.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,598.0	10,599.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 17
10/10/2017	Shaped Charge	10,609.0	10,610.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 17
10/9/2017	Shaped Charge	10,632.0	10,633.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,646.0	10,647.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,660.0	10,661.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,674.0	10,675.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,688.0	10,689.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,702.0	10,703.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,716.0	10,717.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,730.0	10,731.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,744.0	10,745.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,758.0	10,759.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,772.0	10,773.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,786.0	10,787.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 16



Perforation Summary

Well Name SD WE 15 FED P9 6H	License SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Btm (ftKB)	Phasing (*)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/9/2017	Shaped Charge	10,800.0	10,801.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,814.0	10,815.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 16
10/9/2017	Shaped Charge	10,828.0	10,829.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,842.0	10,843.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,856.0	10,857.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,870.0	10,871.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,884.0	10,885.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,898.0	10,899.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,912.0	10,913.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,926.0	10,927.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,940.0	10,941.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,954.0	10,955.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,968.0	10,969.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,982.0	10,983.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	10,996.0	10,997.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 15
10/9/2017	Shaped Charge	11,010.0	11,011.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 15
10/8/2017	Shaped Charge	11,024.0	11,025.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,038.0	11,037.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,052.0	11,053.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,066.0	11,067.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,080.0	11,081.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,094.0	11,095.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Btm (ftKB)	Phasing (")	Gun Size (in)	Chg Sz (g)	Charge Make	Carner Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/8/2017	Shaped Charge	11,108.0	11,109.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,122.0	11,123.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,136.0	11,137.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,150.0	11,151.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,164.0	11,165.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,178.0	11,179.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,192.0	11,193.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,206.0	11,207.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 14
10/8/2017	Shaped Charge	11,220.0	11,221.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,234.0	11,235.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,248.0	11,249.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,262.0	11,263.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,276.0	11,277.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,290.0	11,291.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,304.0	11,305.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,318.0	11,319.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,330.0	11,331.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,346.0	11,347.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,360.0	11,361.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,372.0	11,373.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,388.0	11,389.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 13
10/8/2017	Shaped Charge	11,402.0	11,403.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 13



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/7/2017	Shaped Charge	11,416.0	11,417.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,430.0	11,431.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,444.0	11,445.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,457.0	11,458.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,472.0	11,473.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,486.0	11,487.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,500.0	11,501.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,514.0	11,515.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,528.0	11,529.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,542.0	11,543.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,556.0	11,557.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,570.0	11,571.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,584.0	11,585.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 12
10/7/2017	Shaped Charge	11,598.0	11,599.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 12
10/5/2017	Shaped Charge	11,612.0	11,613.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,626.0	11,627.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,640.0	11,641.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,654.0	11,655.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,668.0	11,669.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,682.0	11,683.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,696.0	11,697.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 11
10/5/2017	Shaped Charge	11,710.0	11,711.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 11



Perforation Summary

Well Name SD WE 15 FED P9 6H	Logfile SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations														
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (*)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com	
10/5/2017	Shaped Charge	11,724.0	11,725.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 11	
10/5/2017	Shaped Charge	11,738.0	11,739.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 11	
10/5/2017	Shaped Charge	11,752.0	11,753.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 11	
10/5/2017	Shaped Charge	11,766.0	11,767.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 11	
10/5/2017	Shaped Charge	11,780.0	11,781.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 11	
10/5/2017	Shaped Charge	11,794.0	11,795.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 11	
10/4/2017	Shaped Charge	11,808.0	11,809.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,820.0	11,821.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,836.0	11,837.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,850.0	11,851.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,864.0	11,865.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,878.0	11,879.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,892.0	11,893.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,906.0	11,907.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,920.0	11,921.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,934.0	11,935.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,948.0	11,949.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,962.0	11,963.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,976.0	11,977.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 10	
10/4/2017	Shaped Charge	11,990.0	11,991.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 10	
10/3/2017	Shaped Charge	12,004.0	12,005.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9	
10/3/2017	Shaped Charge	12,018.0	12,019.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9	



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface ID# 3002543641	Surface Chain PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/3/2017	Shaped Charge	12,032.0	12,033.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,046.0	12,047.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,060.0	12,061.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,074.0	12,075.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,088.0	12,089.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,102.0	12,103.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,116.0	12,117.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,130.0	12,131.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,144.0	12,145.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,158.0	12,159.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,172.0	12,173.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,184.0	12,185.0	80	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 9
10/3/2017	Shaped Charge	12,202.0	12,203.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,214.0	12,215.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,228.0	12,229.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,242.0	12,243.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,256.0	12,257.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,270.0	12,271.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,284.0	12,285.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,298.0	12,299.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,312.0	12,313.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,328.0	12,329.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 8



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8758
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Perforations													
Date	Perforation Type	Top (ftKB)	Blm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/3/2017	Shaped Charge	12,340.0	12,341.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,354.0	12,355.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,368.0	12,369.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 8
10/3/2017	Shaped Charge	12,382.0	12,383.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 8
10/2/2017	Shaped Charge	12,396.0	12,397.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,410.0	12,411.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,424.0	12,425.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,438.0	12,439.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,454.0	12,455.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,466.0	12,467.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,480.0	12,481.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,495.0	12,496.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,508.0	12,509.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,522.0	12,523.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,538.0	12,539.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,550.0	12,551.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,564.0	12,565.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 7
10/2/2017	Shaped Charge	12,578.0	12,579.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 7
10/1/2017	Shaped Charge	12,592.0	12,593.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,620.0	12,621.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,634.0	12,635.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,648.0	12,649.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Botm (ftKB)	Phasing (")	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/1/2017	Shaped Charge	12,662.0	12,663.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,676.0	12,677.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,690.0	12,691.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,704.0	12,705.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,718.0	12,719.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,732.0	12,733.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,746.0	12,747.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,760.0	12,761.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,774.0	12,775.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 6
10/1/2017	Shaped Charge	12,984.0	12,985.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	12,998.0	12,999.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,012.0	13,013.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,026.0	13,027.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,040.0	13,041.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,054.0	13,055.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,068.0	13,069.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,082.0	13,083.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,096.0	13,097.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,110.0	13,111.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,124.0	13,125.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,138.0	13,139.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 4
10/1/2017	Shaped Charge	13,152.0	13,153.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 4



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChvNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Botm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
10/1/2017	Shaped Charge	13,166.0	13,167.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 4
9/30/2017	Shaped Charge	13,180.0	13,181.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,194.0	13,195.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,210.0	13,211.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,222.0	13,223.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,236.0	13,237.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,250.0	13,251.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,264.0	13,265.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,278.0	13,279.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,292.0	13,293.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,306.0	13,307.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,320.0	13,321.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,334.0	13,335.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,348.0	13,349.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 3
9/30/2017	Shaped Charge	13,360.0	13,361.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 3
9/29/2017	Shaped Charge	13,376.0	13,377.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,390.0	13,391.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,404.0	13,405.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,418.0	13,419.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,432.0	13,433.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,446.0	13,447.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,460.0	13,461.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 2



Perforation Summary

Well Name SD WE 15 FED P9 6H	Lease SD WE 15 FED P9	Field Name JENNINGS	Business Unit Mid-Continent	Surface UWI 3002543641	Surface ChevNo PK8756
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Perforations													
Date	Perforation Type	Top (ftKB)	Btm (ftKB)	Phasing (°)	Gun Size (in)	Chg Sz (g)	Charge Make	Carrier Make	Shot Dens (shots/ft)	Entered Shot Total	# Shots Misfired	Perf Comp	Com
9/29/2017	Shaped Charge	13,474.0	13,475.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,488.0	13,489.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,502.0	13,503.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,516.0	13,517.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,530.0	13,531.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,544.0	13,545.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 2
9/29/2017	Shaped Charge	13,558.0	13,559.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 2
9/28/2017	Shaped Charge	13,572.0	13,573.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,586.0	13,587.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,600.0	13,601.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,614.0	13,615.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,628.0	13,629.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,642.0	13,643.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	2.0	2	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,656.0	13,657.0	180	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,670.0	13,671.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,684.0	13,685.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,698.0	13,699.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,712.0	13,713.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	3.0	3	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,726.0	13,727.0	120	3 1/8	21.0	Halliburton Energy Services	JRC	4.0	4	0	Halliburton	Stage 1
9/28/2017	Shaped Charge	13,740.0	13,741.0	60	3 1/8	21.0	Halliburton Energy Services	JRC	5.0	5	0	Halliburton	Stage 1



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869'Proj: 13923'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Tranlam
Scale	0.999959	Report Generated	6/5/2017 at 2:47:04 PM
Convergence at slot	0.36° East	Database/Source file	WA_Midland/SD_WE_15_Federal_P9_No_6H_awp_263_-_13869_Proj_13923_.xml

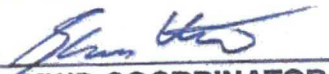
WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	25.00	709149.00	377296.00	32°02'07.818"N	103°39'30.219"W
Facility Reference Pt			709124.00	377296.00	32°02'07.819"N	103°39'30.510"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig: Nabors X30 (KB) to Facility Vertical Datum	3189.60ft
Horizontal Reference Pt	Slot	Rig: Nabors X30 (KB) to Mean Sea Level	3189.60ft
Vertical Reference Pt	Rig: Nabors X30 (KB)	Rig: Nabors X30 (KB) to Ground Level at Slot (SD WE 15 Fed P9 No. 6H)	32.60ft
MD Reference Pt	Rig: Nabors X30 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.84°

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well.


MWD COORDINATOR



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869'Proj: 13923'
Page 2 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH DATA (137 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	45.000	0.00	0.00	0.00	0.00	709149.00	377296.00	32°02'07.818"N	103°39'30.219"W	0.00	
32.60	0.000	45.000	32.60	0.00	0.00	0.00	709149.00	377296.00	32°02'07.818"N	103°39'30.219"W	0.00	
263.00	1.500	45.000	262.97	2.13	2.13	2.13	709151.13	377298.13	32°02'07.839"N	103°39'30.194"W	0.65	
358.00	1.200	41.000	357.95	3.75	3.76	3.66	709152.66	377299.76	32°02'07.855"N	103°39'30.176"W	0.33	
449.00	1.500	30.000	448.92	5.50	5.51	4.88	709153.88	377301.51	32°02'07.872"N	103°39'30.162"W	0.43	
540.00	1.300	17.000	539.90	7.52	7.53	5.78	709154.78	377303.53	32°02'07.892"N	103°39'30.152"W	0.41	
637.00	1.300	18.000	636.87	9.61	9.63	6.44	709155.44	377305.63	32°02'07.913"N	103°39'30.144"W	0.02	
708.00	1.560	16.560	707.85	11.30	11.32	6.97	709155.97	377307.32	32°02'07.929"N	103°39'30.137"W	0.37	
799.00	1.590	20.100	798.81	13.67	13.70	7.76	709156.75	377309.70	32°02'07.953"N	103°39'30.128"W	0.11	
890.00	1.630	15.820	889.78	16.10	16.13	8.54	709157.54	377312.13	32°02'07.977"N	103°39'30.119"W	0.14	
979.00	1.830	20.940	978.74	18.65	18.67	9.39	709158.39	377314.67	32°02'08.002"N	103°39'30.109"W	0.28	
1068.00	1.860	22.430	1067.69	21.30	21.33	10.45	709159.45	377317.33	32°02'08.028"N	103°39'30.096"W	0.06	
1156.00	0.960	7.430	1155.66	23.35	23.39	11.09	709160.09	377319.38	32°02'08.048"N	103°39'30.089"W	1.10	
1245.00	0.570	309.760	1244.66	24.38	24.41	10.85	709159.85	377320.41	32°02'08.058"N	103°39'30.091"W	0.91	
1333.00	0.740	308.410	1332.65	25.00	25.02	10.06	709159.06	377321.02	32°02'08.065"N	103°39'30.101"W	0.20	
1422.00	0.960	292.490	1421.64	25.63	25.65	8.91	709157.90	377321.65	32°02'08.071"N	103°39'30.114"W	0.34	
1511.00	0.990	297.070	1510.63	26.27	26.29	7.53	709156.53	377322.29	32°02'08.077"N	103°39'30.130"W	0.09	
1600.00	1.020	286.970	1599.61	26.85	26.87	6.09	709155.09	377322.87	32°02'08.083"N	103°39'30.147"W	0.20	
1688.00	1.170	287.680	1687.60	27.36	27.37	4.48	709153.48	377323.37	32°02'08.088"N	103°39'30.165"W	0.17	
1777.00	1.310	282.320	1776.58	27.85	27.86	2.62	709151.62	377323.86	32°02'08.093"N	103°39'30.187"W	0.20	
1865.00	1.360	281.870	1864.55	28.29	28.29	0.62	709149.62	377324.29	32°02'08.098"N	103°39'30.210"W	0.06	
1953.00	1.130	225.940	1952.54	27.91	27.90	-1.03	709147.97	377323.90	32°02'08.094"N	103°39'30.229"W	1.35	
2042.00	2.320	186.560	2041.50	25.51	25.50	-1.86	709147.14	377321.50	32°02'08.070"N	103°39'30.239"W	1.81	
2131.00	2.920	181.830	2130.40	21.45	21.45	-2.14	709146.86	377317.45	32°02'08.030"N	103°39'30.243"W	0.72	
2220.00	2.970	179.400	2219.29	16.88	16.88	-2.19	709146.81	377312.88	32°02'07.985"N	103°39'30.243"W	0.15	
2309.00	3.160	181.150	2308.16	12.12	12.12	-2.21	709146.79	377308.12	32°02'07.938"N	103°39'30.244"W	0.24	
2398.00	3.270	184.680	2397.02	7.14	7.14	-2.47	709146.53	377303.14	32°02'07.888"N	103°39'30.247"W	0.25	
2487.00	2.620	189.750	2485.90	2.61	2.60	-3.02	709145.98	377298.60	32°02'07.844"N	103°39'30.254"W	0.79	
2576.00	0.890	204.780	2574.86	-0.02	-0.03	-3.66	709145.34	377295.97	32°02'07.818"N	103°39'30.262"W	1.99	
2665.00	0.700	229.630	2663.85	-1.00	-1.01	-4.38	709144.64	377294.99	32°02'07.808"N	103°39'30.270"W	0.44	



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869'Proj: 13923'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2753.00	0.740	249.510	2751.84	-1.54	-1.56	-5.30	709143.70	377294.44	32°02'07.803"N	103°39'30.281"W	0.29	
2842.00	0.920	253.500	2840.83	-1.94	-1.96	-6.53	709142.47	377294.04	32°02'07.799"N	103°39'30.295"W	0.21	
2931.00	1.470	237.000	2929.81	-2.76	-2.79	-8.17	709140.83	377293.21	32°02'07.791"N	103°39'30.314"W	0.72	
3020.00	0.390	279.170	3018.80	-3.33	-3.36	-9.42	709139.58	377292.64	32°02'07.785"N	103°39'30.329"W	1.36	
3109.00	2.320	41.100	3107.78	-1.93	-1.96	-8.54	709140.46	377294.05	32°02'07.799"N	103°39'30.319"W	2.88	
3198.00	3.900	52.250	3196.64	1.27	1.26	-4.96	709144.04	377297.26	32°02'07.830"N	103°39'30.277"W	1.89	
3286.00	4.250	55.650	3284.42	4.93	4.93	0.10	709149.10	377300.93	32°02'07.866"N	103°39'30.218"W	0.48	
3376.00	4.680	53.970	3374.15	8.95	8.97	5.82	709154.82	377304.97	32°02'07.906"N	103°39'30.151"W	0.50	
3464.00	5.100	54.920	3461.83	13.30	13.33	11.92	709160.92	377309.33	32°02'07.949"N	103°39'30.080"W	0.49	
3552.00	5.250	54.850	3549.47	17.84	17.89	18.42	709167.42	377313.89	32°02'07.994"N	103°39'30.004"W	0.17	
3641.00	5.520	52.090	3638.08	22.80	22.87	25.12	709174.12	377318.87	32°02'08.042"N	103°39'29.926"W	0.42	
3729.00	5.650	48.080	3725.66	28.27	28.36	31.69	709180.68	377324.36	32°02'08.096"N	103°39'29.849"W	0.47	
3818.00	5.660	47.440	3814.23	34.15	34.26	38.18	709187.18	377330.26	32°02'08.154"N	103°39'29.773"W	0.07	
3907.00	5.890	51.520	3902.77	39.94	40.07	44.99	709193.98	377336.07	32°02'08.211"N	103°39'29.694"W	0.53	
3995.00	6.180	56.640	3990.29	45.34	45.48	52.48	709201.47	377341.48	32°02'08.264"N	103°39'29.606"W	0.69	
4084.00	6.120	60.200	4078.77	50.31	50.48	60.59	709209.59	377346.47	32°02'08.313"N	103°39'29.512"W	0.43	
4173.00	5.170	64.430	4167.34	54.37	54.56	68.33	709217.33	377350.56	32°02'08.353"N	103°39'29.422"W	1.16	
4261.00	5.080	68.240	4254.99	57.51	57.72	75.52	709224.52	377353.72	32°02'08.384"N	103°39'29.338"W	0.40	
4350.00	5.420	71.130	4343.62	60.31	60.54	83.16	709232.16	377356.54	32°02'08.412"N	103°39'29.249"W	0.48	
4438.00	5.330	70.750	4431.23	62.98	63.23	90.95	709239.95	377359.23	32°02'08.438"N	103°39'29.158"W	0.11	12 1/4 BHI MWD 708' - 4438'
4527.00	5.340	73.380	4519.85	65.50	65.78	98.82	709247.82	377361.78	32°02'08.462"N	103°39'29.066"W	0.27	
4704.00	3.170	43.130	4696.37	71.40	71.71	110.06	709259.06	377367.70	32°02'08.520"N	103°39'28.935"W	1.72	
4880.00	1.250	357.590	4872.24	76.86	77.18	113.31	709262.31	377373.17	32°02'08.574"N	103°39'28.897"W	1.40	
5057.00	1.030	355.780	5049.20	80.38	80.69	113.11	709262.11	377376.69	32°02'08.609"N	103°39'28.899"W	0.13	
5234.00	0.960	351.910	5226.18	83.43	83.75	112.79	709261.78	377379.74	32°02'08.639"N	103°39'28.903"W	0.05	
5411.00	0.850	337.670	5403.16	86.12	86.43	112.08	709261.07	377382.43	32°02'08.666"N	103°39'28.911"W	0.14	
5588.00	0.760	321.830	5580.14	88.26	88.57	110.86	709259.85	377384.56	32°02'08.687"N	103°39'28.925"W	0.14	
5767.00	0.720	311.520	5759.12	89.94	90.25	109.28	709258.27	377386.24	32°02'08.704"N	103°39'28.943"W	0.08	
5944.00	0.530	301.600	5936.11	91.11	91.41	107.75	709256.74	377387.41	32°02'08.716"N	103°39'28.961"W	0.12	
6120.00	0.520	306.340	6112.11	92.01	92.31	106.41	709255.41	377388.31	32°02'08.725"N	103°39'28.976"W	0.03	



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869'Proj: 13923'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6297.00	0.310	324.940	6289.10	92.89	93.18	105.49	709254.49	377389.18	32°02'08.733"N	103°39'28.987"W	0.14	
6474.00	0.260	297.490	6466.10	93.46	93.76	104.86	709253.85	377389.75	32°02'08.739"N	103°39'28.994"W	0.08	
6651.00	0.430	266.860	6643.10	93.62	93.91	103.84	709252.84	377389.90	32°02'08.740"N	103°39'29.006"W	0.14	
6828.00	0.630	243.810	6820.09	93.15	93.44	102.30	709251.30	377389.44	32°02'08.736"N	103°39'29.024"W	0.16	
7006.00	0.820	245.830	6998.08	92.33	92.61	100.55	709249.54	377388.61	32°02'08.728"N	103°39'29.045"W	0.01	
7183.00	0.650	246.220	7175.07	91.54	91.82	98.75	709247.75	377387.81	32°02'08.720"N	103°39'29.065"W	0.02	
7360.00	0.590	248.200	7352.06	90.80	91.07	96.99	709245.99	377387.07	32°02'08.713"N	103°39'29.086"W	0.04	
7537.00	0.670	246.360	7529.05	90.05	90.32	95.20	709244.19	377386.32	32°02'08.706"N	103°39'29.107"W	0.05	
7714.00	0.620	212.670	7706.03	88.84	89.10	93.73	709242.73	377385.10	32°02'08.694"N	103°39'29.124"W	0.21	
7891.00	0.810	197.130	7883.02	86.84	87.10	92.85	709241.84	377383.09	32°02'08.674"N	103°39'29.134"W	0.15	
8068.00	0.650	193.720	8060.01	84.67	84.93	92.24	709241.23	377380.92	32°02'08.652"N	103°39'29.142"W	0.09	
8244.00	0.620	193.210	8236.00	82.77	83.03	91.78	709240.78	377379.03	32°02'08.634"N	103°39'29.147"W	0.02	
8421.00	0.880	192.410	8412.98	80.52	80.77	91.27	709240.27	377376.77	32°02'08.611"N	103°39'29.153"W	0.15	
8489.00	1.080	206.370	8480.97	79.43	79.69	90.88	709239.87	377375.68	32°02'08.601"N	103°39'29.158"W	0.46	
8577.00	8.330	3.950	8568.69	85.06	85.32	90.95	709239.94	377381.31	32°02'08.656"N	103°39'29.157"W	10.61	
8665.00	17.870	5.930	8654.30	104.89	105.15	92.79	709241.78	377401.15	32°02'08.852"N	103°39'29.134"W	10.85	
8754.00	24.010	3.580	8737.39	136.57	136.83	95.33	709244.33	377432.83	32°02'09.166"N	103°39'29.102"W	6.96	
8842.00	31.430	4.890	8815.23	177.35	177.62	98.41	709247.40	377473.61	32°02'09.569"N	103°39'29.063"W	8.46	
8931.00	39.110	3.340	8887.84	228.56	228.84	102.03	709251.02	377524.83	32°02'10.076"N	103°39'29.017"W	8.69	
9020.00	47.740	1.600	8952.42	289.61	289.91	104.59	709253.58	377585.89	32°02'10.680"N	103°39'28.983"W	9.79	
9108.00	59.630	1.410	9004.45	360.36	360.66	106.44	709255.43	377656.65	32°02'11.380"N	103°39'28.957"W	13.51	
9196.00	73.640	358.880	9039.26	440.94	441.24	106.55	709255.54	377737.22	32°02'12.177"N	103°39'28.950"W	16.14	
9233.00	79.490	358.690	9047.86	476.90	477.20	105.78	709254.78	377773.18	32°02'12.533"N	103°39'28.956"W	15.82	
9286.00	86.760	359.790	9054.20	529.48	529.78	105.09	709254.08	377825.76	32°02'13.054"N	103°39'28.960"W	13.87	
9376.00	87.440	359.530	9058.75	619.37	619.66	104.56	709253.55	377915.63	32°02'13.943"N	103°39'28.960"W	0.81	
9464.00	89.630	358.600	9061.00	707.32	707.61	103.12	709252.12	378003.58	32°02'14.813"N	103°39'28.970"W	2.70	
9553.00	90.180	357.450	9061.15	796.28	796.56	100.05	709249.05	378092.52	32°02'15.694"N	103°39'28.999"W	1.43	
9641.00	89.320	355.770	9061.53	884.13	884.40	94.85	709243.84	378180.36	32°02'16.563"N	103°39'29.053"W	2.14	
9730.00	90.680	357.060	9061.53	972.97	973.22	89.28	709238.28	378269.18	32°02'17.443"N	103°39'29.111"W	2.11	
9818.00	91.420	0.640	9059.92	1080.93	1081.17	87.52	709236.51	378357.13	32°02'18.313"N	103°39'29.126"W	4.15	



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869'Proj: 13923'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9907.00	92.590	1.450	9056.81	1149.85	1150.10	89.14	709238.14	378446.05	32°02'19.193"N	103°39'29.100"W	1.60	
9996.00	91.390	0.990	9053.71	1238.77	1239.03	91.03	709240.03	378534.97	32°02'20.073"N	103°39'29.072"W	1.44	
10084.00	90.430	0.480	9052.32	1326.74	1327.01	92.16	709241.16	378622.95	32°02'20.943"N	103°39'29.052"W	1.24	
10173.00	90.180	0.840	9051.84	1415.73	1416.00	93.19	709242.18	378711.94	32°02'21.824"N	103°39'29.034"W	0.49	
10261.00	91.630	1.280	9050.45	1503.70	1503.97	94.80	709243.80	378799.91	32°02'22.694"N	103°39'29.009"W	1.72	
10350.00	92.470	1.530	9047.27	1592.61	1592.89	96.97	709245.96	378888.82	32°02'23.574"N	103°39'28.977"W	0.99	
10438.00	90.770	0.710	9044.78	1680.55	1680.83	98.68	709247.68	378976.76	32°02'24.444"N	103°39'28.951"W	2.14	
10527.00	91.850	359.770	9042.75	1769.52	1769.81	99.06	709248.05	379065.73	32°02'25.325"N	103°39'28.940"W	1.61	8 3/4 BHI MWD 4527' - 10527'
10615.00	89.570	0.150	9041.66	1857.51	1857.79	99.00	709247.99	379153.71	32°02'26.195"N	103°39'28.934"W	2.63	
10704.00	90.310	0.590	9041.75	1946.50	1946.79	99.57	709248.57	379242.71	32°02'27.078"N	103°39'28.921"W	0.97	
10792.00	89.970	0.530	9041.54	2034.50	2034.79	100.43	709249.43	379330.70	32°02'27.947"N	103°39'28.905"W	0.39	
10881.00	90.220	0.350	9041.39	2123.49	2123.78	101.11	709250.11	379419.69	32°02'28.827"N	103°39'28.890"W	0.35	
10969.00	92.400	0.140	9039.38	2211.46	2211.75	101.49	709250.49	379507.66	32°02'29.698"N	103°39'28.880"W	2.49	
11058.00	90.090	359.680	9037.44	2300.43	2300.73	101.35	709250.35	379596.63	32°02'30.578"N	103°39'28.875"W	2.65	
11146.00	89.940	359.580	9037.42	2388.43	2388.72	100.78	709249.78	379684.62	32°02'31.449"N	103°39'28.875"W	0.20	
11235.00	92.160	359.950	9035.79	2477.41	2477.70	100.42	709249.41	379773.60	32°02'32.330"N	103°39'28.873"W	2.53	
11323.00	88.460	359.350	9035.31	2565.39	2565.68	99.88	709248.88	379861.57	32°02'33.200"N	103°39'28.873"W	4.26	
11412.00	87.100	358.720	9038.76	2654.32	2654.60	98.38	709247.38	379950.49	32°02'34.080"N	103°39'28.884"W	1.68	
11500.00	90.150	0.360	9040.87	2742.28	2742.56	97.68	709246.67	380038.44	32°02'34.951"N	103°39'28.885"W	3.93	
11589.00	87.780	359.170	9042.48	2831.25	2831.54	97.31	709246.31	380127.42	32°02'35.831"N	103°39'28.883"W	2.98	
11677.00	89.910	358.670	9044.25	2919.22	2919.50	95.65	709244.65	380215.37	32°02'36.702"N	103°39'28.896"W	2.49	
11766.00	92.190	359.320	9042.62	3008.19	3008.46	94.09	709243.09	380304.33	32°02'37.582"N	103°39'28.908"W	2.66	
11854.00	92.500	359.150	9039.02	3096.11	3096.38	92.92	709241.91	380392.25	32°02'38.452"N	103°39'28.915"W	0.40	
11943.00	93.790	358.660	9034.14	3184.96	3185.23	91.22	709240.22	380481.09	32°02'39.332"N	103°39'28.928"W	1.55	
12031.00	92.370	359.760	9029.41	3272.83	3273.09	90.01	709239.01	380568.95	32°02'40.201"N	103°39'28.936"W	2.04	
12120.00	92.960	0.130	9025.27	3361.73	3361.99	89.92	709238.92	380657.85	32°02'41.081"N	103°39'28.930"W	0.78	
12208.00	91.140	0.220	9022.12	3449.67	3449.93	90.19	709239.19	380745.79	32°02'41.951"N	103°39'28.921"W	2.07	
12296.00	91.170	0.350	9020.35	3537.65	3537.91	90.63	709239.63	380833.76	32°02'42.822"N	103°39'28.909"W	0.15	
12384.00	88.980	359.890	9020.24	3625.64	3625.91	90.82	709239.81	380921.75	32°02'43.692"N	103°39'28.901"W	2.54	
12473.00	88.060	359.500	9022.53	3714.61	3714.88	90.34	709239.34	381010.72	32°02'44.573"N	103°39'28.900"W	1.12	



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869' Proj: 13923'
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12562.00	88.340	359.320	9025.33	3803.56	3803.83	89.43	709238.42	381099.66	32°02'45.453"N	103°39'28.904"W	0.37	
12650.00	87.690	358.220	9028.38	3891.49	3891.75	87.54	709236.53	381187.59	32°02'46.323"N	103°39'28.920"W	1.45	
12740.00	89.450	0.020	9030.62	3981.45	3981.71	86.16	709235.15	381277.54	32°02'47.214"N	103°39'28.929"W	2.80	
12828.00	89.910	359.470	9031.12	4069.45	4069.70	85.77	709234.76	381365.53	32°02'48.084"N	103°39'28.927"W	0.81	
12916.00	89.720	358.610	9031.40	4157.44	4157.69	84.29	709233.29	381453.51	32°02'48.955"N	103°39'28.938"W	1.00	
13005.00	91.850	359.770	9030.18	4246.42	4246.67	83.03	709232.03	381542.48	32°02'49.836"N	103°39'28.946"W	2.73	
13093.00	91.940	359.030	9027.27	4334.37	4334.61	82.11	709231.11	381630.43	32°02'50.706"N	103°39'28.951"W	0.85	
13182.00	93.120	358.280	9023.34	4423.26	4423.50	80.02	709229.02	381719.31	32°02'51.586"N	103°39'28.968"W	1.57	
13270.00	91.570	0.750	9019.74	4511.17	4511.41	79.28	709228.28	381807.22	32°02'52.456"N	103°39'28.971"W	3.31	
13358.00	91.850	0.560	9017.11	4599.13	4599.37	80.29	709229.28	381895.17	32°02'53.326"N	103°39'28.953"W	0.38	
13447.00	91.850	0.030	9014.24	4688.08	4688.32	80.75	709229.74	381984.12	32°02'54.206"N	103°39'28.941"W	0.60	
13536.00	92.310	359.380	9011.01	4777.02	4777.26	80.29	709229.28	382073.05	32°02'55.086"N	103°39'28.940"W	0.89	
13624.00	94.200	359.570	9006.01	4864.87	4865.11	79.48	709228.48	382160.90	32°02'55.956"N	103°39'28.943"W	2.16	
13712.00	92.560	0.520	9000.83	4952.71	4952.95	79.55	709228.55	382248.74	32°02'56.825"N	103°39'28.935"W	2.15	
13801.00	92.840	0.100	8996.63	5041.61	5041.85	80.03	709229.03	382337.64	32°02'57.705"N	103°39'28.923"W	0.57	
13869.00	94.260	0.390	8992.42	5109.47	5109.72	80.32	709229.32	382405.50	32°02'58.376"N	103°39'28.915"W	2.13	3 3/4 BHI MWD 10615' - 13869'
13923.00	94.260	0.390	8988.41	5163.32	5163.57	80.69	709229.69	382459.35	32°02'58.909"N	103°39'28.907"W	0.00	Projection to TD: 13923'

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SD WE 15 Fed P9 No. 6H BHL rev 2	9018.00	5157.22	89.00	709238.00	382453.00	32°02'58.846"N	103°39'28.811"W	point
SD WE 15 Fed P9 No. 6H IP	9064.45	2388.58	96.59	709245.59	379684.48	32°02'31.448"N	103°39'28.924"W	point



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869' Proj: 13923'

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REFERENCE WELLPATH IDENTIFICATION

Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

WELLPATH COMPOSITION - Ref Wellbore: SD WE 15 Fed P9 No. 6H AWB Ref Wellpath: SD WE 15 Federal P9 No. 6H awp 263' - 13869' Proj: 13923'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
32.60	637.00	ISCWSA MWD, Rev. 4 (Standard)	Imported Survey 263' - 637'	SD WE 15 Fed P9 No. 6H AWB
637.00	4438.00	BHI NaviTrak (Standard)	12 1/4 BHI MWD 708' - 4438'	SD WE 15 Fed P9 No. 6H AWB
4438.00	10527.00	BHI NaviTrak (Standard)	8 3/4 BHI MWD 4527' - 10527'	SD WE 15 Fed P9 No. 6H AWB
10527.00	13869.00	BHI NaviTrak (Standard)	8 3/4 BHI MWD 10615' - 13869'	SD WE 15 Fed P9 No. 6H AWB
13869.00	13923.00	Blind Drilling (std)	Projection to bit	SD WE 15 Fed P9 No. 6H AWB



Actual Wellpath Report

SD WE 15 Federal P9 No. 6H awp 263' - 13869' Proj: 13923'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Chevron U.S.A. Inc.	Slot	SD WE 15 Fed P9 No. 6H
Area	Lea County, NM	Well	SD WE 15 Federal P9 No. 6H
Field	Jennings / Upper BN SPRN Shale (Lea County, NM)	Wellbore	SD WE 15 Fed P9 No. 6H AWB
Facility	SD WE 15 Fed P9		

COMMENTS

Wellpath general comments

Well: SD WE 15 Federal P9 No. 6H
Field: Jennings/Upper BN SPRN, Shale
Rig: Nabors X30
Location: Lea Co., NM
API: 30-025-43641-00
Latitude: 32° 02' 07.818" N
Longitude: 103° 39' 30.219" W
DF Elevation: 3189.6 feet
Elev. GL: 3157 feet
Proposed Direction: 359.84°
PBHL: 13923 feet
Duration: 04/28/2017-05/26/2017
FSE's: D. Hardeman
SO#: 8499556
12 1/4 BHI MWD 708' - 4438'
8 3/4 BHI MWD 4527' - 10527'
8 3/4 BHI MWD 10615' - 13869'
Projection to TD: 13923'