

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address CHEVRON U.S.A. INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ Reason for Filing Code/ Effective Date NEW WELL EFFECTIVE 05/2016
⁴ API Number 30 - 25-42637	⁵ Pool Name WC-025,G06 S263319P; BONE SPRING	⁶ Pool Code 97955
⁷ Property Code 314914	⁸ Property Name SALADO DRAW 29 26 33 FED COM	⁹ Well Number 002H

II. ¹⁰ Surface Location

UL or lot no. D	Section 29	Township 26S	Range 33E	Lot Idn	Feet from the 200	North/South Line NORTH	Feet from the 1308	East/West line WEST	County LEA
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¹¹ Bottom Hole Location

UL or lot no. E	Section 32	Township 26S	Range 33E	Lot Idn	Feet from the 353	North/South line SOUTH	Feet from the 1016	East/West line WEST	County LEA
¹² Lse Code FEDERAL	¹³ Producing Method Code FLOWING	¹⁴ Gas Connection Date 03/04/2016	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
	WESTERN PIPELINE	OIL
	ANADARKO	GAS
	7 5/8" LINER SET @ 9290' CMT W/282 SX CMT	

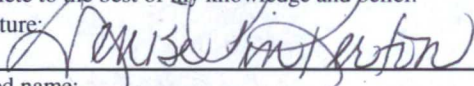
IV. Well Completion Data

²¹ Spud Date 11/14/2015	²² Ready Date 02/25/2016	²³ TD 16,535	²⁴ PBDT 16462	²⁵ Perforations 9495 - 16337	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/8"	850	1006 SX		
12 1/4"	9 5/8"	4800	1536 SX		
8 3/4"	5"	16514	989 SX		
	2 3/8" TBG	8694'			

V. Well Test Data

³¹ Date New Oil 03/04/2016	³² Gas Delivery Date 03/04/2016	³³ Test Date 05/27/2016	³⁴ Test Length 24 HRS	³⁵ Tbg. Pressure 388	³⁶ Csg. Pressure 1092
³⁷ Choke Size	³⁸ Oil 181	³⁹ Water 1356	⁴⁰ Gas 486		⁴¹ Test Method FLOWING

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: 

Printed name:
DENISE PINKERTON

Title:
REGULATORY SPECIALIST

E-mail Address:
Leakejd@chevron.com

Date:
08/30/2016

Phone:
432-687-7375

OIL CONSERVATION DIVISION

Approved by:



Title:

Petroleum Engineer

Approval Date:

09/12/16

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM27506

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name
7. Unit or CA Agreement Name and No.

2. Name of Operator
CHEVRON U.S.A. INC. Contact: DENISE PINKERTON
E-Mail: leakejd@chevron.com

8. Lease Name and Well No.
SALADO DRAW 29 26 33 FED COM 002H

3. Address 6301 DEAUVILLE BLVD
MIDLAND, TX 79706 3a. Phone No. (include area code)
Ph: 432-687-7375

9. API Well No.
30-025-42637

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

10. Field and Pool, or Exploratory
BONE SPRING
11. Sec., T., R., M., or Block and Survey
or Area Sec 29 T26S R33E Mer NMP
12. County or Parish
LEA 13. State
NM

At surface 200FNL 1308FWL
At top prod interval reported below 353FSL 1016FWL
At total depth 353FSL 1016FWL

14. Date Spudded
11/14/2015 15. Date T.D. Reached
01/08/2016 16. Date Completed
☐ D & A ☒ Ready to Prod.
02/25/2016

17. Elevations (DF, KB, RT, GL)*
3215 GL

18. Total Depth: MD 16535
TVD 9202 19. Plug Back T.D.: MD 16462
TVD 20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CCL/GR/CBL 22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 H-40	48.0		850		1006		0	
12.250	9.625 HCK-55	40.0		4800		1536		0	
8.750	5.000 18	18.0		16514		989		3150	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8694	8709						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	9495	16337	9495 TO 16337			PRODUCING (SEE ATTACHED P
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
9495 TO 16337	TOTAL SAND (SAND 100 & SAND 40/70) 9,568,490 LBS (SEE ATTACHED DETAILED REPORT)

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
03/04/2016	05/27/2016	24	→	181.0	486.0	1356.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
40/64"	SI	1092.0	→				2685	POW	

28a. Production - Interval B

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

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

ELECTRONIC SUBMISSION #349522 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
RUSTLER	770	3089	ANHYDRITE	RUSTLER	770
CASTILE	3090	4839	ANHYDRITE	CASTILE	3090
LAMAR	4840	4859	LIMESTONE	LAMAR	4840
BELL CANYON	4860	6249	SANDSTONE	BELL CANYON	4860
CHERRY CANYON	6250	7249	SANDSTONE	CHERRY CANYON	6250
BRUSHY CANYON	7550	9019	SANDSTONE	BRUSHY CANYON	7550
BONE SPRING LIME	9020	9054	LIMESTONE	BONE SPRING LIME	9020
UPPER AVALON	9055	16337	SHALE	UPPER AVALON	9055

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

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

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

**Electronic Submission #349522 Verified by the BLM Well Information System.
For CHEVRON U.S.A. INC., sent to the Hobbs**

Name (please print) DENISE PINKERTONTitle PERMITTING SPECIALIST

Signature _____ (Electronic Submission)

Date 08/30/2016

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM27506

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

SALADO DRAW 29 26 33 FED COM 002H

2. Name of Operator

CHEVRON U.S.A. INC.

Contact: DENISE PINKERTON

E-Mail: leakejd@chevron.com

9. API Well No.

30-025-42637

3a. Address

6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)

Ph: 432-687-7375

10. Field and Pool, or Exploratory

BONE SPRING

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

Sec 29 T26S R33E Mer NMP 200FNL 1308FWL

11. County or Parish, and State

LEA COUNTY, NM

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

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

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

COMPLETION REPORT FOR NEW DRILL:

01/30/2016: MIRU.

02/02/2016: TIH W/RCBL LOG TO SURFACE W/1000 PSI ON WELL. TIH W/CBL TO 8800 WL TD. LOG

CCL/GR/CBL TO SURFACE @ 60 FT/MIN, 1000PSI.TOC @ 3150'.

02/04/2016: PRESS UP ON PROD CSG TO 9500PSI. HELD FOR 30 MINS. GOOD.

02/05/2016 THROUGH 02/25/2016: PERF STAGE 1 THROUGH STAGE 23

PERFS: 9495 - 16,337 FRAC W/TOTAL SAND (SAND 100 & SAND 40/70)9,568,490 lbs

*****DETAILED PERF & FRAC REPORT ATTACHED*****

03/08/2016: TIH & SET PKR @ 8709 WLM.

04/12/2016: RAN 2 3/8" TBG & SET @ 8694'. TAG PKR @ 8710.62. WORK TBG TO LATCH ONTO PKR. LATCH ON & WORK TBG TO RELEASE ON/OFF TOOL. CIRC 180 BBLS 8.6 PPG PKR FLUID.

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

**Electronic Submission #349496 verified by the BLM Well Information System
For CHEVRON U.S.A. INC., sent to the Hobbs**

Name (Printed/Typed) DENISE PINKERTON

Title PERMITTING SPECIALIST

Signature (Electronic Submission)

Date 08/30/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office _____	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

Additional data for EC transaction #349496 that would not fit on the form

32. Additional remarks, continued

04/13/2016: RIG DOWN. RELEASE RIG. TBG PSI @ 500#.

05/27/2016: ON 24 HR OPT. FLOWING 181 OIL, 486 GAS, 1356 WATER. GOR-2685.
TBG-388 PSI. CSG - 1092 PSI. CHOKE - 40/64"

SALADO DRAW 29 26 33 FED COM #002H

PERF & FRAC INFORMATION

STAGE 1: 16335, 16275, 16215, 16155, 16095

6 spf, .41 dia hole. Pump down using 485 bbls treat water @ 15bpm. Max press-7820psi.

PUMP STAGE 1:

Sand in formation 312,000lbs 132% Prime up & test lines to 9500psi.
Equalize/open well @ 1391 psi. Avg Rate 80.0bpm. Avg press:7672psi.
Max Rate: 87.0 bpm Max Press:8086psi. ISIP:1735 psi
Pump Time 124 mins Total clean fluid 8937 bbls Total slurry volume 9402 bbls
Sand pumped: Sand 100 – 33,000 lbs Sand 40/70 – 380,240 lbs TOTAL:413,240 lbs

STAGE 2: 16035, 15972, 15915, 15855, 15795

6 jspf, .41 dia hole. Pump down @ 13 bpm 1900 psi line tension before set 1520# 1450# after 493 bbls pmpd.

PUMP STAGE 2:

Sand in formation 419,850 lbs: 98% Test lines to 9500 psi.
Equalize/open well @ 1366 psi. Avg Rate: 85.0bpm Avg Pressure 7000psi
Max rate: 85.0bpm Max Pressure 8022 psi ISIP 1717psi
Pump Time: 126 mins. Total clean fluid:8831 bbls Total Slurry volume:9284 bbls
Sand pumped: Sand 100 – 32,000 lbs, Sand 40/70: 378,600 lbs TOTAL: 410,600 lbs

STAGE 3: 15735, 15675, 15612, 15555, 15495

6 jspf, .41 dia hole. Pump down @ 14bpm. Line tension: 1352psi before, 1295psi after 368 bbls pmpd.

PUMP STAGE 3:

Sand in formation 419,850lbs, 99% Prime up & test lines to 9500psi.
Equalize/open well @ 1156psi. Ave Rate: 80.0bpm Ave Pressure: 7555psi
Max Rate: 84.0bpm, Max Pressure: 8444psi. ISIP:1724psi.
Pump Time: 122mins. Total clean fluid: 8469bbls. Total slurry volume: 8899 bbls
Sand Pumped: Sand 100 – 31,920lbs, Sand 40/70: 383,520lbs. TOTAL: 415,440lbs

STAGE 4: 15438, 15375, 15315, 15252, 15195

6 JSPF, .41 dia hole. Pump dn @ 14bpm. Line tension before set 1540psi & 1465 after. Max press of 2050psi w/346 bbls pumped.

PUMP STAGE 4:

Sand in formation 419,850lbs, 97% Prime up & test lines to 9500psi.
Equalize/open well @ 1309 psi. Avg Rate: 78.4bpm, Avg Pressure: 6690psi.
Max Rate: 84.0bpm, Max Pressure: 7706psi. ISIP:1815psi.
Pump Time: 139mins. Total clean fluid: 8903bbls, Total slurry volume: 9371bbls
Sand pumped: sand 100: 30,000lbs, Sand 40/70L 376,120lbs, TOTAL: 406,120lbs

STAGE 5: 15135, 15078, 15015, 14955, 14895

6 JSPF, .41 dia hole. Pump dn @ 12bpm. Line tension before set 1483 psi, & 1438 after. Max pressure of 2024 psi w/328bbls pumped.

PUMP STAGE 5:

Sand in formation: 419,850 lbs, 97%, Prime up & test lines to 9500psi.
Equalize/open well @ 1087psi. Ave Rate: 82.6bpm, Avg pressure: 7110psi

Max Rate: 82.6bpm, Max Pressure: 7110psi. ISIP: 1953psi.
Pump Time: 137 mins. Total clean fluid: 9176 bbls, Total Slurry volume: 9646 bbls
Sand pumped: Sand 100: 32,000 lbs, Sand 40/70: 374,060 lbs, TOTAL: 406,060 lbs

STAGE 6: 14835, 14775, 14715, 14655, 14595

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1458 psi, & 1378 after. Max Pressure of 1981 psi w/312 bbls pumped.

PUMP STAGE 6:

Sand in formation: 419,850 lbs, 98%. Prime up & test lines to 9500 psi.
Equalize/open well @ 1108 psi. Ave Rate: 84.9bpm, Ave Pressure: 6941psi.
Max rate: 86.0bpm, Max Pressure: 7914 psi. ISIP: 1981psi.
Pump time: 123 mins. Total clean fluid: 8569 bbls, Total Slurry volume: 9018 bbls
Sand pumped: sand 100: 33,000 lbs, sand 40/70: 379,260 lbs. TOTAL: 412,260 lbs

STAGE 7: 14535, 14475, 14415, 14355, 14295

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1405 psi & 1348 after. Max pressure of 2124 psi w/325 bbls pumped.

PUMP STAGE 7:

Sand in formation: 419,850 lbs, 99%, Prime up & test lines to 9500 psi.
Equalize/open hole @ 1337 psi. Ave rate: 84.0 bpm, Ave Pressure: 7088 psi
Max rate: 85.4 bpm, Max Pressure: 8007 psi. ISIP: 2202 psi.
Pump time: 129 mins. Total clean fluid: 8826 bbls, Total slurry volume: 9288 bbls.
Sand Pumped: Sand 100: 32,000 lbs, Sand 40/70: 383,200 lbs, TOTAL: 415,200 lbs

STAGE 8: 14235, 14175, 14115, 14055, 13995

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1305 psi, & 1253 after. Max pressure of 2360 psi w/284 bbls pumped.

PUMP STAGE 8:

Sand in formation: 419850 lbs, 98%, Prime up & test lines to 9500 psi.
Equalize/open hole @ 1437 psi. Ave Rate: 85.4 bpm, Ave pressure: 6972 psi
Max Rate: 85.0 bpm, Max pressure: 8426 psi. ISIP: 2074 psi.
Pump time: 126 mins. Total clean fluid: 8797 bbls, Total slurry volume: 9268 bbls
Sand pumped: Sand 100: 32,000 lbs, Sand 40/70: 379,750 lbs. TOTAL 411,750 lbs

STAGE 9: 13935, 13875, 13815, 13755, 13695

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1425 lbs & 1360 after. Max pressure of 2252 psi w/293 bbls pumped.

PUMP STAGE 9:

Sand in Formation: 419,850 lbs, 97% Prime up & test lines to 9500 psi.
Equalize/open well @ 1352 psi. Ave Rate: 84.7 bpm, Ave Pressure: 7129 psi.
Max rate: 86.0 bpm, Max pressure: 8039 psi. ISIP: 2296 psi.
Pump time: 123 mins. Total Clean fluid: 8611 bbls, Total slurry volume: 9049 bbls
Sand pumped: Sand 100: 32,040 lbs, Sand 40/70: 373,8600 lbs. TOTAL: 405,900 lbs

STAGE 10: 13635, 13575, 13515, 13455, 13395

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1420 lbs & 1350 after. Max press of 2325 psi w/259 bbls pumped.

PUMP STAGE 10:

Sand in formation: 419,850 lbs, 97% Prime up and test lines to 9500 psi.
Equalize/open well @ 1437 psi. Ave Rate: 82.0 bpm, Ave Pressure: 7013 psi.
Max Rate: 86.0 bpm, Max pressure: 8032 psi. ISIP: 1938 psi.
Pump time: 130 mins. Total clean fluid: 8642 bbls, Total slurry volume: 9091 bbls
Sand pumped: Sand 100: 30,000 lbs, Sand 40/70: 378,400 lbs. TOTAL 408,400 lbs

STAGE 11: 13335, 13275, 13215, 13155, 13095

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1458 lbs & 1300 after. Max Press 2006 psi w/272 bbls pumped.

PUMP STAGE 11:

Sand in formation: 419,850 lbs, 99%, Prime up and test lines to 9500 psi.
Equalize/open well @ 1133 psi. Ave Rate: 84.9 bpm. Ave Pressure: 6808 psi.
Max rate: 86.0 bpm, Max pressure: 7780 psi. ISIP: 2228 psi.
Pump time: 130 mins. Total clean fluid: 9032 bbls, total slurry volume 9503 bbls.
Sand pumped: Sand 100: 31,000 lbs, Sand 40/70: 384,360 lbs, TOTAL: 415,360 lbs

STAGE 12: 13035, 12975, 12915, 12850, 12795

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1320 psi & 1282 after. Max Presre of 2036 psi w/202 bbls puped.

PUMP STAGE 12:

Sand in formation: 419,850 lbs, 100% Prime up and test lines to 9500 psi.
Equalize/open well @ 1434 psi. Ave Rate: 84.0 bpm, Ave pressure: 6591 psi
Max rate: 86.0 bpm, Max pressure: 8029 psi, ISIP: 2224 psi.
Pump time: 129 mins, Total clean fluid: 8838 bbls, Total slurry volume: 9298 bbls.
Sand pumped: Sand 100: 32,580 lbs, Sand 40/70: 388,160 lbs, TOTAL: 420,740 lbs.

STAGE 13: 12735, 12675, 12615, 12555, 12495

6 JSPF, .41 dia holle. Pump dn @ 12 bpm. Line tension before set 1325 lbs & 1200 after. Max pressure of 1974 psi w/209 bbls pumped.

PUMP STAGE 13:

Sand in formation: 419,850 lbs, 96%, Prime up & test lines to 9500 psi.
Equalize/open well @ 1305 psi. Ave Rate: 83.2 bpm, Ave Pressure: 6662 psi.
Max Rate: 84.7 bpm, Max Pressure: 7358 psi. ISIP: 2217 psi.
Pump time: 120 mins. Total clean fluid: 8634 bbls, Total slurry volume: 9082 bbls.
Sand pumped: Sand 100: 31,000 lbs, Sand 40/70: 372,280 lbs TOTAL: 403,280 lbs

STAGE 14: 12435, 12375, 12310, 12255, 12195

6 JSPF, .41 dia hole. Pump down @ 12 bpm. Line tension before set 1382 psi & 1220 after. Max press of 2006 psi w/193 bbls pumped.

PUMP STAGE 14:

Sand in formation: 419,850 lbs 101%. Prime up & test lines to 9500 psi.
Equalize/open hole W 1180 psi. Ave rate: 83.0 bpm, Ave Press: 6084 psi
Max Rate: 86.0 bpm, Max pressure: 7167 psi. ISIP: 1996 psi.
Pump time: 137 mins. Total clean fluid: 9632 bbls, Total slurry volume: 10,102 bbls.
Sand pumped: Sand 100: 30,000 lbs, Sand 40/70: 393,000 lbs, TOTAL 423,000 lbs.

STAGE 15: 12138, 12075, 12015, 11958, 11895

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1411 psi & 1235 after. Max press 1834 psi @ 182 bbls pumped.

PUMP STAGE 15:

Sand in formation: 419850 lbs, 101%. Prime up & test lines to 9500 psi.

Equalize/open well @ 1098 psi. Ave Rate: 76.7 bpm, Ave Pressure: 5852 psi.

Max Rate: 84.9 bpm, Max pressure: 7670 psi, ISIP: psi.

Pump time 142 mins, Total clean fluid: 9239 bbls, Total slurry volume: 9720 bbls

Sand pumped: Sand 100: 34,000 lbs, Sand 40/70: 388,300 lbs, TOTAL 422,300 lbs

STAGE 16: 11835, 11778, 11715, 11655, 11598

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1355 psi & 1185 after. Max press 2175psi w/147 bbls pumped.

PUMP STAGE 16:

Sand in formation: 419,850 lbs, 101%, Prime up & test lines to 9500 psi.

Equalize/open well @ 991 psi. Ave Rate: 83.0 bpm, Ave Press: 6,778 psi.

Max rate: 86.0 bpm, Max Pressure: 7958 psi. ISIP: 2354 psi.

Pump time: 123 mins. Total clean fluid: 8422 bbls, Total Slurry volume: 8851 bbls.

Sand pumped: Sand 100: 32380 lbs, Sand 40/70: 392,040 lbs, TOTAL 424,420 lbs

STAGE 17: 11535, 11475, 11415, 11355, 11295

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1337 lbs & 1155 after. Max press of 2260 psi w/155 bbls pumped.

PUMP STAGE 17:

Sand in formation: 419,850 lbs 102% Prime up & test lines to 9500 psi.

Equalize/open well @ 1498 psi. Ave Rate: 84.7 bpm, Avg Pressure: 6464 psi.

Max Rate: 86.0 bpm, Max pressure: 6977 psi. ISIP: 2364 psi.

Pump time 127 mins, Total clean fluid: 8828 bbls, Total slurry volume: 9298 bbls

Sand pump: Sand 100: 32,000 lbs, Sand 40/70: 394,320 lbs, TOTAL: 426,320 lbs

STAGE 18: 11235, 11175, 11115, 11055, 10995

6 JSPF, .41 dia hole. Pump dn @ 15 bpm. Line tension before set 1330 lbs & 1130 lbs after. Max press of 2360 psi w/124 bbls pumped.

PUMP STAGE 18:

Sand in formation: 419,850 lbs 100% Prime up & test lines to 9500 psi.

Equalize/open well @ 1552 psi. Ave rate: 86.0 bpm, Avg Pressure: 6641 psi

Max rate: 87.0 bpm, Max Pressure: 7664 psi, ISIP: 2446 psi.

Pump time: 122 mins. Total clean fluid: 8721 bbls, Total slurry volume: 9182 bbls.

Sand pumped: Sand 100: 31,600 lbs, Sand 40/70: 389,320 lbs, TOTAL: 420,920 lbs

STAGE 19: 10935, 10875, 10816, 10755, 10695

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1233 lbs & 1094 after. Max press 2249 psi w/114 bbls pumped.

PUMP STAGE 19:

Sand in formation: 419,850 lbs 100%, Prime up & test lines to 9500 psi.

Equalize/open well @ 1716psi. Ave rate: 85.4 bpm, Ave pressure: 6476 psi.

Max rate: 87.0 bpm, Max pressure: 7211 psi. ISIP: 2454 psi.

Pump time: 142 mins. Total clean fluid: 9386 bbls, Total slurry volume: 9904 bbls.

Sand pumped: Sand 100: 32,000 lbs, Sand 40/70: 389,400 lbs, TOTAL: 421,400 lbs

STAGE 20: 10632, 10575, 10515, 10458, 10395

6 JSPF, .41 dia hole. Pump dn @ 15 bpm. Line tension before set 1330 lbs & 1130 lbs after. Max press of 2607 psi w/90 bbls pumped.

PUMP STAGE 20:

Sand in formation: 419,850 lbs 100% Prime up and test lines to 9500 psi.

Equalize/open well @ 1627 psi. Ave rate: 85.0 bpm, Ave pressure: 6350 psi.

Max rate: 86.0 bpm, Max pressure: 6970 psi. ISIP: 2200 psi.

Pump time: 577 mins, Total Clean fluid: 10168 bbls, Total slurry volume: 10,663 bbls.

Sand pumped: Sand 100: 32,060 lbs, Sand 40/70: 388,480 lbs, TOTAL 420,540 lbs

STAGE 21: 10335, 10277, 10215, 10155, 10095

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1160 lbs & 1160 after. Max press of 2700 psi w/131 bbls pumped.

PUMP STAGE 21:

Sand in formation: 419,850 lbs, 100% Prime up and test lines to 9500 psi.

Equalize/open well @ 1709 psi. Ave rate: 86.0 bpm, Ave Pressure: 6441 psi.

Max rate: 86.5 bpm, Max pressure: 7106 psi. ISIP: 2328 psi.

Pump time: 127 mins. Total clean fluid: 8351 bbls, Total slurry volume: 8796 bbls

Sand pumped: Sand 100: 30,000 lbs, Sand 40/70: 387,340 lbs, TOTAL: 419,340 lbs

STAGE 22: 10035, 9975, 9915, 9855, 9795

6 JSPF. Pump dn @ 12 bpm. Line tension before set @ 1225 lbs & 1062 after. Max press of 2220 psi w/71 bbls pumped.

PUMP STAGE 22:

Sand in formation: 419,850 lbs 101%, Prime up & test lines to 9500 psi.

Equalize/open well @ 1895 psi. Ave Rate: 84.5 bpm, Ave pressure: 5794 psi.

Max rate: 85.0 bpm, Max pressure: 5997 psi. ISIP: 2505 psi.

Pump time: 129 mins. Total clean fluid: 9098 bbls, Total slurry volum: 9594 bbls

Sand pumped: Sand 100: 30,000 lbs, Sand 40/70: 394,220 lbs, TOTAL: 424,220 lbs

STAGE 23: 9735, 9675, 9615, 9555, 9495

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Line tension before set 1275 lbs & 1160 after. Max press 2450 psi w/33 bbls pumped.

PUMP STAGE 23:

Sand in formation: 419,850 lbs 100%, Prime up & test lines to 9500 psi.

Equalize/open well @ 1623 psi. Ave Rate: 86.0 bpm, Ave Pressure: 6126 psi.

Max Rate: 86.6 bpm, Max pressure: 7285 psi. ISIP: 2482 psi.

Pump time: 138 mins. Total clean fluid: 9225 bbls, Total slurry volume: 9733 bbls

Sand Pumped: Sand 100: 34,040 lbs, Sand 40/70: 387,640 lbs, TOTAL: 421,680 lbs.