

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

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

HOBBS OCD

OCT 03 2016

RECEIVED

Form C-104
Revised August 1, 2011

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 06/2016
⁴ API Number 30 - 25-42798	⁵ Pool Name WC-025,G06 S263319P; BONE SPRING	⁶ Pool Code 97955
⁷ Property Code 315270	⁸ Property Name SD EA 19 FEDERAL P6	⁹ Well Number 006H

II. ¹⁰ Surface Location

UL or lot no. B	Section 19	Township 26S	Range 33E	Lot Idn	Feet from the 207	North/South Line NORTH	Feet from the 1732	East/West line EAST	County LEA
--------------------	---------------	-----------------	--------------	---------	----------------------	---------------------------	-----------------------	------------------------	---------------

¹¹ Bottom Hole Location

UL or lot no. O	Section 19	Township 26S	Range 33E	Lot Idn	Feet from the 375	North/South line SOUTH	Feet from the 1621	East/West line EAST	County LEA
¹² Lse Code FEDERAL	¹³ Producing Method Code FLOWING	¹⁴ Gas Connection Date 06/24/2016	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

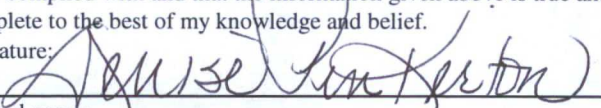
¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
		OIL
	WESTERN PIPELINE	
		GAS
	ANADARKO	

IV. Well Completion Data

²¹ Spud Date 01/30/2016	²² Ready Date 05/16/2016	²³ TD 13,928	²⁴ PBTD 13,865	²⁵ Perforations 9425 - 13,702	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2"	13 3/8"	840	1006 SX		
12 1/4"	9 5/8"	4729	1527 SX		
8 3/4"	5 1/2"	13,730	1635 SX		
	2 7/8" TBG	8670'			

V. Well Test Data

³¹ Date New Oil 06/24/2016	³² Gas Delivery Date 06/24/2016	³³ Test Date 07/20/2016	³⁴ Test Length 24 HRS	³⁵ Tbg. Pressure 683	³⁶ Csg. Pressure
³⁷ Choke Size 30/64	³⁸ Oil 626	³⁹ Water 357	⁴⁰ Gas 1493		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: 		OIL CONSERVATION DIVISION	
Printed name: DENISE PINKERTON		Approved by: 	
Title: REGULATORY SPECIALIST		Title: Petroleum Engineer	
E-mail Address: Leakejd@chevron.com		Approval Date: 10/07/16	
Date: 09/28/2016	Phone: 432-687-7375		

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM275061a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
CHEVRON U.S.A. INC.Contact: DENISE PINKERTON
E-Mail: leakejd@chevron.com8. Lease Name and Well No.
SD EA 19 FED P6 006H3. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 797063a. Phone No. (include area code)
Ph: 432-687-73759. API Well No.
30-025-42798

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

At surface 207FNL 1732FEL

At top prod interval reported below 375FSL 1621FEL

At total depth 375FSL 1621FEL

10. Field and Pool, or Exploratory
BONE SPRING11. Sec., T., R., M., or Block and Survey
or Area Sec 19 T26S R33E Mer NMP12. County or Parish
LEA13. State
NM14. Date Spudded
02/01/201615. Date T.D. Reached
03/02/201616. Date Completed
☐ D & A ☒ Ready to Prod.
05/16/201617. Elevations (DF, KB, RT, GL)*
3205 GL18. Total Depth: MD
TVD 13742
913219. Plug Back T.D.: MD
TVD 1364320. Depth Bridge Plug Set: MD
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5		840		1006		0	
12.250	9.625 HCK-55	40.0		4729		1527		0	
8.750	5.500 P-110	20.0		13730		1635		4892	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8670	8648						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	9490	13549	9490 TO 13549			PRODUCING ***SEE DETAILED R
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
9490 TO 13549	FRAC WITH TOTAL SAND (100 MESH & 40/70) = 5,652,433 LBS (**SEE DETAILED REPORT ATTACHED)

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
06/24/2016	07/20/2016	24	→	626.0	1493.0	357.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
30/64	683		→				2385	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. SI	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 #352968 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	710	2939	ANHYDRITE	RUSTLER	710
CASTILE	2940	4759	ANHYDRITE	CASTILE	2940
LAMAR	4760	4779	LIMESTONE	LAMAR	4760
BELL CANYON	4780	5844	SANDSTONE	BELL CANYON	4780
CHERRY CANYON	5845	7509	SANDSTONE	CHERRY CANYON	5845
BRUSHY CANYON	7510	8964	SANDSTONE	BRUSHY CANYON	7510
BONE SPRING LIME	8965	9021	LIMESTONE	BONE SPRING LIME	8965
UPPER AVALON	9022	13742	SHALE	UPPER AVALON	9022

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 #352968 Verified by the BLM Well Information System.
For CHEVRON U.S.A. INC., sent to the Hobbs**

Name (please print) DENISE PINKERTONTitle PERMITTING SPECIALISTSignature (Electronic Submission)Date 09/28/2016

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.8. Well Name and No.
SD EA 19 FEDERAL P6 006H9. API Well No.
30-025-4279810. Field and Pool, or Exploratory
BONE SPRING11. County or Parish, and State
LEA COUNTY, NM1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
CHEVRON U.S.A. INC. Contact: DENISE PINKERTON
E-Mail: leakejd@chevron.com3a. Address
6301 DEAUVILLE BLVD
MIDLAND, TX 79706
3b. Phone No. (include area code)
Ph: 432-687-73754. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 19 T26S R33E Mer NMP 207FNL 1732FEL**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

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

04/20/2016: MIRU.

04/22/2016: TIH W/GR/JB TO 9400'. TIH W/CBL FR 9423-SURFACE. TOC @ 4892';

04/26/2016: TEST LINES TO 3000PSI. GOOD.

04/27/2016: TEST SURF LINES TO 1000/9850 FOR 5/5 MINS. GOOD. ESTABLISH INJ RATE. TOTAL BBLS PUMPED 68 BBLS. SIP - 1700PSI.

05/01/2016 THROUGH 05/16/2016: PERF STAGES 1 - 14: 9490 - 13,549'.

FRAC W/TOTAL SAND (100 MESH & 40/70) = 5,652,433 LBS

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

05/18/2016: TEST BOP: 1500PSI PRECHARGE, 2800PSI STARTING, 1750PSI FINAL.

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

**Electronic Submission #352966 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 09/28/2016

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 #352966 that would not fit on the form

32. Additional remarks, continued

05/23/2016: TIH W/GR/JB TO 8701'.

05/24/2016: RDMO WIRELINE UNIT.

06/07/2016: MIRU WSI TEST EQPT & TEST BOP BLIND RAMS & PIPE RAMS 250L/4500H FOR 5 MINS. GOOD. TEST ANNULAR 250L & 3000H. GOOD.

06/08/2016: PKR @ 8648'. SET 2 7/8" TBG @ 8670'.
RIG DOWN.

07/20/2016: ON 24 HR OPT. FLOWING 626 OIL, 1493 GAS, & 357 WATER. GOR - 2385.

TBG PSI - 683 PSI ON 30/64" CHOKE.



Casing Summary

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Surface, Planned?-N, 840ftKB

Set Depth (MD) (ftKB) 840		Set Tension (kips)		String Nominal OD (in) 13 3/8		String Min Drift (in)		Centralizers 9		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Casing Joint	13 3/8	12.615	54.50	J-55	ST&C	-4	-4	0.00		1,130.0
1	Landing Joint	13 3/8	12.615	54.50	J-55	ST&C	-4	35	39.23		1,130.0
1	Wellhead	13 3/8	12.615	54.50	J-55	ST&C	35	38	2.87		1,130.0
1	Pup Joint	13 3/8	12.615	54.50	J-55	ST&C	38	43	4.36		1,130.0
18	Casing Joint	13 3/8	12.615	54.50	J-55	ST&C	43	796	753.28		1,130.0
1	Float Collar	13 3/8	12.615	54.50	J-55	ST&C	796	797	1.38		1,130.0
1	Casing Joint	13 3/8	12.615	54.50	J-55	ST&C	797	838	40.95		1,130.0
1	Texas Pattern Guide Shoe	13 3/8	12.615	54.50	J-55	ST&C	838	840	1.78		1,130.0

Intermediate Casing 1, Planned?-N, 4,729ftKB

Set Depth (MD) (ftKB) 4,729		Set Tension (kips)		String Nominal OD (in) 9 5/8		String Min Drift (in) 8.688		Centralizers 30		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	-6	-6	0.00	3,950.0	4,230.0
1	Landing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	-6	36	41.85	3,950.0	4,230.0
1	Hanger Joint	9 5/8	8.844	40.00	HCK-55	LT&C	36	37	0.80	3,950.0	4,230.0
1	Pup Joint	9 5/8	8.844	40.00	HCK-55	LT&C	37	41	4.05	3,950.0	4,230.0
110	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	41	4,642	4,601.15	3,950.0	4,230.0
1	Float Collar	9 5/8	8.844	40.00	HCK-55	LT&C	4,642	4,644	1.42	3,950.0	4,230.0
2	Casing Joint	9 5/8	8.844	40.00	HCK-55	LT&C	4,644	4,727	83.70	3,950.0	4,230.0
1	Float Shoe	9 5/8	8.844	40.00	HCK-55	LT&C	4,727	4,729	1.66	3,950.0	4,230.0

Production Casing, Planned?-N, 13,730ftKB

Set Depth (MD) (ftKB) 13,730		Set Tension (kips)		String Nominal OD (in) 5 1/2		String Min Drift (in) 4.656		Centralizers 101		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Landing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	-4	36	39.91	12,360.0	11,100.0
1	Hanger	5 1/2	4.781	20.00	P-110	TXP BTC	36	36	0.15	12,360.0	11,100.0
1	Pup Joint	5 1/2	4.781	20.00	P-110	TXP BTC	36	41	4.22	12,360.0	11,100.0
21	Casing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	41	8,612	8,571.54	12,360.0	11,100.0
1	Marker Joint	5 1/2	4.781	20.00	P-110	TXP BTC	8,612	8,618	5.46	12,360.0	11,100.0
12	Casing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	8,618	13,564	4,946.08	12,360.0	11,100.0
1	Pup Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,564	13,573	9.31	12,360.0	11,100.0
1	RSI Tool	5 1/2	4.781	20.00	P-110	TXP BTC	13,573	13,580	6.63	12,360.0	11,100.0
1	Pup Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,580	13,590	10.02	12,360.0	11,100.0
1	Casing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,590	13,630	40.45	12,360.0	11,100.0
1	Pup Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,630	13,640	9.95	12,360.0	11,100.0
1	Landing Collar	5 1/2	4.781	20.00	P-110	TXP BTC	13,640	13,641	1.47	12,360.0	11,100.0
1	Casing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,641	13,682	40.67	12,360.0	11,100.0
1	Float Collar	5 1/2	4.781	20.00	P-110	TXP BTC	13,682	13,685	2.43	12,360.0	11,100.0
1	XRV Tool	5 1/2	4.781	20.00	P-110	TXP BTC	13,685	13,687	2.18	12,360.0	11,100.0
1	Casing Joint	5 1/2	4.781	20.00	P-110	TXP BTC	13,687	13,727	40.58	12,360.0	11,100.0
1	Float Shoe	5 1/2	4.781	20.00	P-110	TXP BTC	13,727	13,730	2.69	12,360.0	11,100.0



Cement Summary

Production Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015		Mud Line Elevation (ft)	Water Depth (ft)

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description Class H + 2% D046 + .2% D065 + .4% D167 + .2% D800 + 75% D151 + .1% D208	Quantity (sacks) 121	Class H	Volume Pumped (bbl) 47.0
Estimated Top (ftKB) 12,954.0	Estimated Bottom Depth (ftKB) 13,742.0	Percent Excess Pumped (%) 0.0	Yield (ft ³ /sack) 2.18	Fluid Mix Ratio (gal/sack) 9.55
Free Water (%)	Density (lb/gal) 15.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description 20 bbls Acetic Acid 283 bbls FW	Quantity (sacks)	Class	Volume Pumped (bbl) 303.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.33	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Original Hole

Wellbore Name Original Hole		Directional Type Horizontal		Min Kick Off Depth (ftKB) 8,697.0		Vertical Section Direction (*) 178.70	
Hole Size (in)		Act Top (ftKB)			Act Btm (ftKB)		
17 1/2		32.6			850.0		
12 1/4		850.0			4,739.0		
8 3/4		4,739.0			13,742.0		

Multi-bowl, FMC on 2/21/2016 07:00

Sub-Type Multi-bowl			Install Date 2/21/2016				
Des	Make	Model	WP (psi)	Service	SN		
	FMC						

Surface, Planned?-N, 840ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Surface	Original Hole	2/1/2016	840	3.9	
Centralizers			Scratchers		
9					

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	0.00	-4	-4
1	Landing Joint	13 3/8	12.615	54.50	J-55		ST&C	39.23	-4	35
1	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.87	35	38
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.36	38	43
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	753.28	43	796
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.38	796	797
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	40.95	797	838
1	Texas Pattern Guide Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	838	840

Intermediate Casing 1, Planned?-N, 4,729ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 2/24/2016	Set Depth (MD) (ftKB) 4,729	Stick Up (ftKB) 5.6	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.00	-6	-6
1	Landing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	41.85	-6	36
1	Hanger Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.80	36	37
1	Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.05	37	41
110	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,601.15	41	4,642
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.42	4,642	4,644
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	83.70	4,644	4,727
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	1.66	4,727	4,729

Production Casing, Planned?-N, 13,730ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing	Original Hole	3/3/2016	13,730	3.7	
Centralizers 101			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	39.91	-4	36
1	Hanger	5 1/2	4.781	20.00	P-110		TXP BTC	0.15	36	36
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4.22	36	41
211	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	8,571.54	41	8,612
1	Marker Joint	5 1/2	4.781	20.00	P-110		TXP BTC	5.46	8,612	8,618
122	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4,946.08	8,618	13,564
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.31	13,564	13,573
1	RSI Tool	5 1/2	4.781	20.00	P-110		TXP BTC	6.63	13,573	13,580
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	10.02	13,580	13,590
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.45	13,590	13,630
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.95	13,630	13,640
1	Landing Collar	5 1/2	4.781	20.00	P-110		TXP BTC	1.47	13,640	13,641
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.67	13,641	13,682
1	Float Collar	5 1/2	4.781	20.00	P-110		TXP BTC	2.43	13,682	13,685
1	XRV Tool	5 1/2	4.781	20.00	P-110		TXP BTC	2.18	13,685	13,687
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.58	13,687	13,727



Cement Summary

Intermediate Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Original Hole

Wellbore Name Original Hole		Directional Type Horizontal		Min Kick Off Depth (ftKB) 8,697.0		Vertical Section Direction (°) 178.70	
Hole Size (in)		Act Top (ftKB)		Act Btm (ftKB)			
17 1/2		32.6		850.0			
12 1/4		850.0		4,739.0			
8 3/4		4,739.0		13,742.0			

Multi-bowl, FMC on 2/21/2016 07:00

Sub-Type Multi-bowl		Install Date 2/21/2016					
Des	Make	Model	WP (psi)	Service	SN		
	FMC						

Surface, Planned?-N, 840ftKB

Casing Description Surface	Wellbore Original Hole	Run Date 2/1/2016	Set Depth (MD) (ftKB) 840	Stick Up (ftKB) 3.9	Set Tension (kips)
Centralizers 9			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	0.00	-4	-4
1	Landing Joint	13 3/8	12.615	54.50	J-55		ST&C	39.23	-4	35
1	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.87	35	38
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.36	38	43
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	753.28	43	796
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.38	796	797
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	40.95	797	838
1	Texas Pattern Guide Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	838	840

Intermediate Casing 1, Planned?-N, 4,729ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 2/24/2016	Set Depth (MD) (ftKB) 4,729	Stick Up (ftKB) 5.6	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.00	-6	-6
1	Landing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	41.85	-6	36
1	Hanger Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.80	36	37
1	Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.05	37	41
110	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,601.15	41	4,642
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.42	4,642	4,644
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	83.70	4,644	4,727
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	1.66	4,727	4,729

Production Casing, Planned?-N, 13,730ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing	Original Hole	3/3/2016	13,730	3.7	
Centralizers 101			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	39.91	-4	36
1	Hanger	5 1/2	4.781	20.00	P-110		TXP BTC	0.15	36	36
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4.22	36	41
211	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	8,571.54	41	8,612
1	Marker Joint	5 1/2	4.781	20.00	P-110		TXP BTC	5.46	8,612	8,618
122	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4,946.08	8,618	13,564
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.31	13,564	13,573
1	RSI Tool	5 1/2	4.781	20.00	P-110		TXP BTC	6.63	13,573	13,580
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	10.02	13,580	13,590
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.45	13,590	13,630
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.95	13,630	13,640
1	Landing Collar	5 1/2	4.781	20.00	P-110		TXP BTC	1.47	13,640	13,641
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.67	13,641	13,682
1	Float Collar	5 1/2	4.781	20.00	P-110		TXP BTC	2.43	13,682	13,685
1	XRV Tool	5 1/2	4.781	20.00	P-110		TXP BTC	2.18	13,685	13,687
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.58	13,687	13,727



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Float Shoe	5 1/2	4.781	20.00	P-110		TXP BTC	2.69	13,727	13,730

Surface Casing Cement, Casing, 2/1/2016 13:34

Cementing Start Date 2/1/2016		Cementing End Date 2/1/2016		Wellbore Original Hole	
Evaluation Method Returns to Surface		Cement Evaluation Results Full returns			

Comment

Tested service lines to 2868psi. Pumped 40 bbl FW dyed spacer, 238 bbl (1006 sx) of tail cement, displaced with 123 bbl of 8.34 ppg FW. Did not bump plug. Floats held.

1, 32.6-850.0ftKB

Top Depth (ftKB) 32.6	Bottom Depth (ftKB) 850.0	Full Return? N	Vol Cement Ret (bbl) 113.0	Top Plug? N	Bottom Plug? N
Initial Pump Rate (bbl/min) 4.8	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min) 2.4		Final Pump Pressure (psi) 317.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? N	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	
				Drill Out Date	

Spacer

Fluid Type Spacer	Fluid Description Spacer	Quantity (sacks)	Class	Volume Pumped (bbl) 40.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description Cement	Quantity (sacks) 1,006	Class C	Volume Pumped (bbl) 238.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%) 125.0	Yield (ft ³ /sack) 1.33	Fluid Mix Ratio (gal/sack) 6.37
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description Displacement	Quantity (sacks)	Class	Volume Pumped (bbl) 123.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Intermediate Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Float Shoe	5 1/2	4.781	20.00	P-110		TXP BTC	2.69	13,727	13,730

Intermediate Casing Cement, Casing, 2/24/2016 13:30

Cementing Start Date 2/24/2016		Cementing End Date 2/24/2016		Wellbore Original Hole	
Evaluation Method Returns to Surface		Cement Evaluation Results CMT to surface, bumped plug at calculated displacement, and floats held.			

Comment
130 bbl (300 SX) CMT returned to surface.

1, 32.6-4,739.0ftKB

Top Depth (ftKB) 32.6	Bottom Depth (ftKB) 4,739.0	Full Return? Y	Vol Cement Ret (bbl) 130.0	Top Plug? Y	Bottom Plug? N
Initial Pump Rate (bbl/min) 6.9	Final Pump Rate (bbl/min) 2.3	Avg Pump Rate (bbl/min) 6.5		Final Pump Pressure (psi) 1,250.0	Plug Bump Pressure (psi) 1,750.0
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? N	Pipe RPM (rpm)
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

Spacer

Fluid Type Spacer	Fluid Description Dyed Spacer	Quantity (sacks)	Class	Volume Pumped (bbl) 40.0
Estimated Top (ftKB) 32.6	Estimated Bottom Depth (ftKB) 32.6	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description 50:50 POZ/C	Quantity (sacks) 1,066	Class C	Volume Pumped (bbl) 461.0
Estimated Top (ftKB) 32.6	Estimated Bottom Depth (ftKB) 3,750.0	Percent Excess Pumped (%) 150.0	Yield (ft³/sack) 2.43	Fluid Mix Ratio (gal/sack) 13.98
Free Water (%)	Density (lb/gal) 11.90	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description C-Neat	Quantity (sacks) 461	Class C	Volume Pumped (bbl) 109.0
Estimated Top (ftKB) 3,750.0	Estimated Bottom Depth (ftKB) 4,739.0	Percent Excess Pumped (%) 85.0	Yield (ft³/sack) 1.33	Fluid Mix Ratio (gal/sack) 6.35
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description Displacement	Quantity (sacks)	Class	Volume Pumped (bbl) 352.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Production Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Original Hole

Wellbore Name Original Hole		Directional Type Horizontal		Min Kick Off Depth (ftKB) 8,697.0		Vertical Section Direction (*) 178.70	
Hole Size (in)		Act Top (ftKB)			Act Btm (ftKB)		
17 1/2		32.6			850.0		
12 1/4		850.0			4,739.0		
8 3/4		4,739.0			13,742.0		

Multi-bowl, FMC on 2/21/2016 07:00

Sub-Type Multi-bowl			Install Date 2/21/2016				
Des	Make	Model	WP (psi)	Service	SN		
	FMC						

Surface, Planned?-N, 840ftKB

Casing Description	Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Surface	Original Hole	2/1/2016	840	3.9	
Centralizers			Scratchers		
9					

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	0.00	-4	-4
1	Landing Joint	13 3/8	12.615	54.50	J-55		ST&C	39.23	-4	35
1	Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.87	35	38
1	Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.36	38	43
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	753.28	43	796
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.38	796	797
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	40.95	797	838
1	Texas Pattern Guide Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.78	838	840

Intermediate Casing 1, Planned?-N, 4,729ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 2/24/2016	Set Depth (MD) (ftKB) 4,729	Stick Up (ftKB) 5.6	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.00	-6	-6
1	Landing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	41.85	-6	36
1	Hanger Joint	9 5/8	8.844	40.00	HCK-55		LT&C	0.80	36	37
1	Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.05	37	41
110	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,601.15	41	4,642
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.42	4,642	4,644
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	83.70	4,644	4,727
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	1.66	4,727	4,729

Production Casing, Planned?-N, 13,730ftKB

Casing Description		Wellbore	Run Date	Set Depth (MD) (ftKB)	Stick Up (ftKB)	Set Tension (kips)
Production Casing		Original Hole	3/3/2016	13,730	3.7	
Centralizers 101				Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Landing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	39.91	-4	36
1	Hanger	5 1/2	4.781	20.00	P-110		TXP BTC	0.15	36	36
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4.22	36	41
211	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	8,571.54	41	8,612
1	Marker Joint	5 1/2	4.781	20.00	P-110		TXP BTC	5.46	8,612	8,618
122	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	4,946.08	8,618	13,564
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.31	13,564	13,573
1	RSI Tool	5 1/2	4.781	20.00	P-110		TXP BTC	6.63	13,573	13,580
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	10.02	13,580	13,590
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.45	13,590	13,630
1	Pup Joint	5 1/2	4.781	20.00	P-110		TXP BTC	9.95	13,630	13,640
1	Landing Collar	5 1/2	4.781	20.00	P-110		TXP BTC	1.47	13,640	13,641
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.67	13,641	13,682
1	Float Collar	5 1/2	4.781	20.00	P-110		TXP BTC	2.43	13,682	13,685
1	XRV Tool	5 1/2	4.781	20.00	P-110		TXP BTC	2.18	13,685	13,687
1	Casing Joint	5 1/2	4.781	20.00	P-110		TXP BTC	40.58	13,687	13,727



Cement Summary

Production Casing Cement

Well Name SALADO DRAW EA 19 FED P6 006H		Lease Salado Draw EA 19 Fed P6		Field Name WILDCAT (HOBBS)		Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015				Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Float Shoe	5 1/2	4.781	20.00	P-110		TXP BTC	2.69	13,727	13,730

Production Casing Cement, Casing, 3/3/2016 23:30

Cementing Start Date 3/3/2016		Cementing End Date 3/4/2016	Wellbore Original Hole
Evaluation Method Lift Pressure	Cement Evaluation Results Lost returns at 185 bbls into displacement. Cement in place at 04:00 FCP 1800 psi		

Comment
Pump production cement job as follows:

Pressure Test 500 psi low 5000 psi high
Bleed off
Drop bottom plug
Pump 30 bbl Mudpush @ 10 ppg
Pump 308 bbl of lead 1 @ 5 bpm @ 11.5 ppg
-1.5 lb/bbl CemNET for 20-70 bbl and 120-170 bbl
Pump 246 bbl of lead 2 @ 5.2 bpm @ 12.5 ppg
Pump 47 bbl of tail @ 4.1 bpm @ 15 ppg
Drop plug and wiper balls
Pump 303 bbl of water displacement
-20 bbl Acid @ 6 bpm
-273 bbl Fresh water @ 6 bpm
-10 bbl Fresh water @ 4 bpm
Bump plug at 1800 psi
Hold 500 psi over FCP for 5 minutes
Bled back 2.5 bbl
Floats held

1, 3,900.0-13,742.0ftKB

Top Depth (ftKB) 3,900.0	Bottom Depth (ftKB) 13,742.0	Full Return? N	Vol Cement Ret (bbl) 0.0	Top Plug? Y	Bottom Plug? Y
Initial Pump Rate (bbl/min) 6	Final Pump Rate (bbl/min) 3	Avg Pump Rate (bbl/min) 6		Final Pump Pressure (psi) 1,800.0	Plug Bump Pressure (psi) 1,800.0
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? N	Pipe RPM (rpm)
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

Spacer

Fluid Type Spacer	Fluid Description MUDPUSH Express Spacer	Quantity (sacks)	Class	Volume Pumped (bbl) 30.0
Estimated Top (ftKB) 3,254.0	Estimated Bottom Depth (ftKB) 3,900.0	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 10.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description 50:50 Poz/H + .2% D046 + 6.5% D020 + 8% D154 + .2% D065 + 2lb/sk B288 + 2 lb/sk B289	Quantity (sacks) 653	Class H	Volume Pumped (bbl) 308.0
Estimated Top (ftKB) 3,900.0	Estimated Bottom Depth (ftKB) 8,743.0	Percent Excess Pumped (%) 50.0	Yield (ft³/sack) 2.65	Fluid Mix Ratio (gal/sack) 15.53
Free Water (%)	Density (lb/gal) 11.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

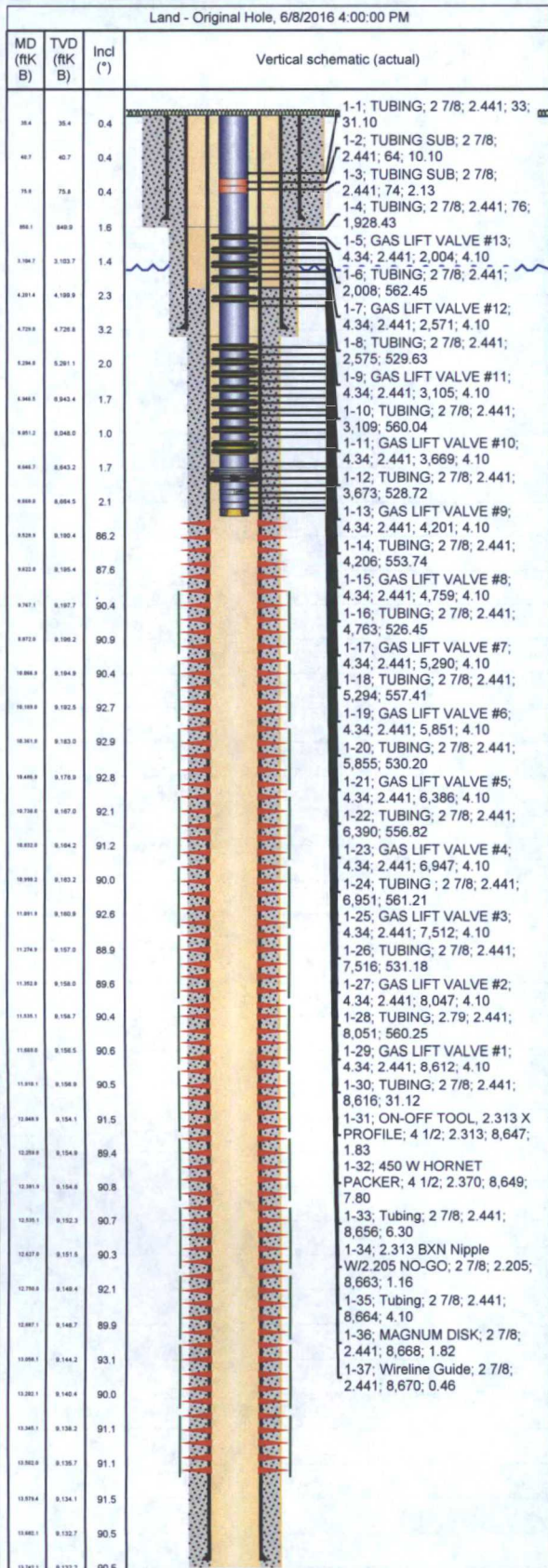
Lead

Fluid Type Lead	Fluid Description TXI + 4% D020 + .2% D046 + .2% D065 + .5% D112 + .4% D013 + .08% D208	Quantity (sacks) 861	Class H	Volume Pumped (bbl) 246.0
Estimated Top (ftKB) 8,743.0	Estimated Bottom Depth (ftKB) 12,954.0	Percent Excess Pumped (%) 35.0	Yield (ft³/sack) 1.60	Fluid Mix Ratio (gal/sack) 8.63
Free Water (%)	Density (lb/gal) 12.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)



Tubing Summary

Well Name SALADO DRAW EA 19 FED P6 006H	Lease Salado Draw EA 19 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB Elevation (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) 32.60	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	

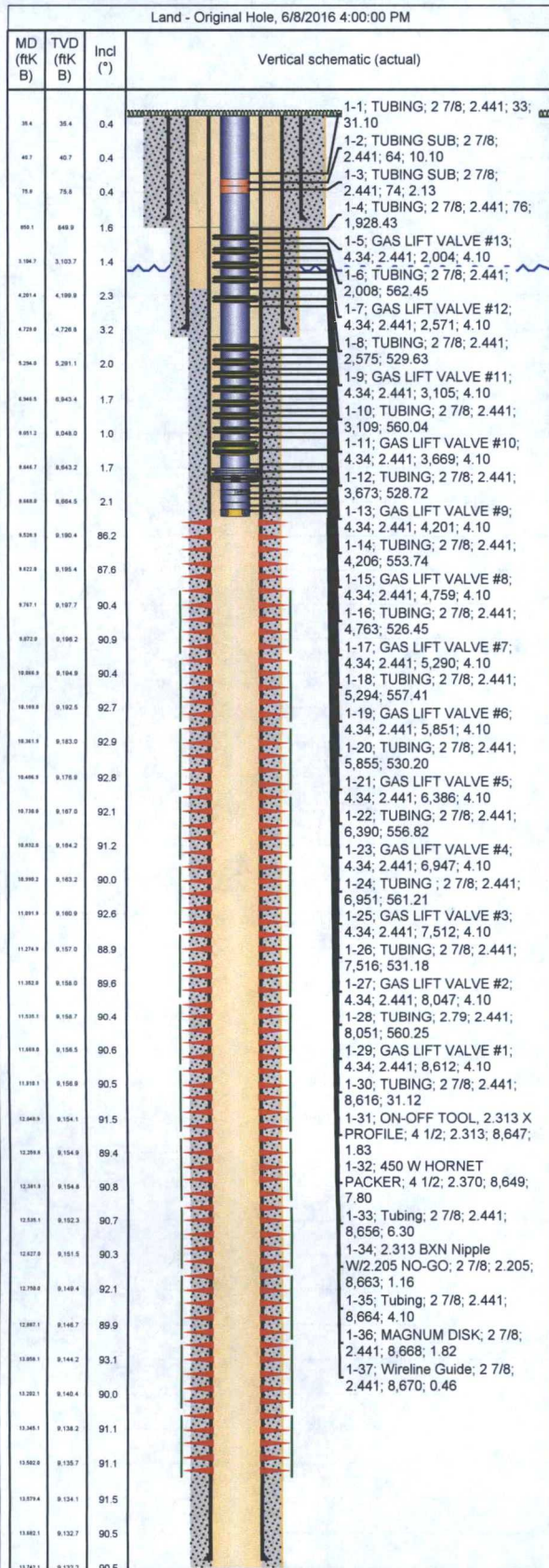


Tubing Strings									
Tubing Description		Planned Run?		Set Depth (MD) (ftKB)		Set Depth (TVD) (ftKB)			
Tubing - Production		N		8,670.3		8,666.8			
Run Date		Run Job		Pull Date		Pull Job			
6/8/2016		Complete, 4/20/2016		00:00					
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
1	TUBING	2 7/8	2.441	6.50	L-80	8RD	31.10	32.5	63.6
1	TUBING SUB	2 7/8	2.441	6.50	L-80	8RD	10.10	63.6	73.7
1	TUBING SUB	2 7/8	2.441	6.50	L-80	8RD	2.13	73.7	75.8
62	TUBING	2 7/8	2.441	6.50	L-80	8RD	1,928.43	75.8	2,004.3
1	GAS LIFT VALVE #13	4.335	2.441			8RD	4.10	2,004.3	2,008.4
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	562.45	2,008.4	2,570.8
1	GAS LIFT VALVE #12	4.335	2.441			8RD	4.10	2,570.8	2,574.9
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	529.63	2,574.9	3,104.5
1	GAS LIFT VALVE #11	4.335	2.441			8RD	4.10	3,104.5	3,108.6
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	560.04	3,108.6	3,668.7
1	GAS LIFT VALVE #10	4.335	2.441			8RD	4.10	3,668.7	3,672.8
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	528.72	3,672.8	4,201.5
1	GAS LIFT VALVE #9	4.335	2.441			8RD	4.10	4,201.5	4,205.6
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	553.74	4,205.6	4,759.3
1	GAS LIFT VALVE #8	4.335	2.441			8RD	4.10	4,759.3	4,763.4
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	526.45	4,763.4	5,289.9
1	GAS LIFT VALVE #7	4.335	2.441			8RD	4.10	5,289.9	5,294.0
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	557.41	5,294.0	5,851.4
1	GAS LIFT VALVE #6	4.335	2.441			8RD	4.10	5,851.4	5,855.5
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	530.20	5,855.5	6,385.7
1	GAS LIFT VALVE #5	4.335	2.441			8RD	4.10	6,385.7	6,389.8
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	556.82	6,389.8	6,946.6
1	GAS LIFT VALVE #4	4.335	2.441			8RD	4.10	6,946.6	6,950.7
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	561.21	6,950.7	7,511.9
1	GAS LIFT VALVE #3	4.335	2.441			8RD	4.10	7,511.9	7,516.0
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	531.18	7,516.0	8,047.2
1	GAS LIFT VALVE #2	4.335	2.441			8TRD	4.10	8,047.2	8,051.3
18	TUBING	2.785	2.441	6.50	L-80	8RD	560.25	8,051.3	8,611.6
1	GAS LIFT VALVE #1	4.335	2.441			8RD	4.10	8,611.6	8,615.7
1	TUBING	2 7/8	2.441	6.50	L-80	8RD	31.12	8,615.7	8,646.8
1	ON-OFF TOOL, 2.313 X PROFILE	4 1/2	2.313			8RD	1.83	8,646.8	8,648.6
1	450 W HORNET PACKER	4 1/2	2.370			8RD	7.80	8,648.6	8,656.4
1	Tubing	2 7/8	2.441	6.40	L-80	8RD	6.30	8,656.4	8,662.7



Tubing Summary

Well Name SALADO DRAW EA 19 FED P6 006H	Lease Salado Draw EA 19 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft) 3,205.00	Original RKB Elevation (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) 32.60	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	



Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
1	2.313 BXN Nipple W/2.205 NO-GO	2 7/8	2.205			8RD	1.16	8,662.7	8,663.9
1	Tubing	2 7/8	2.441	6.40	L-80	8RD	4.10	8,663.9	8,668.0
1	MAGNUM DISK	2 7/8	2.441			8RD	1.82	8,668.0	8,669.8
1	Wireline Guide	2 7/8	2.441			8RD	0.46	8,669.8	8,670.3

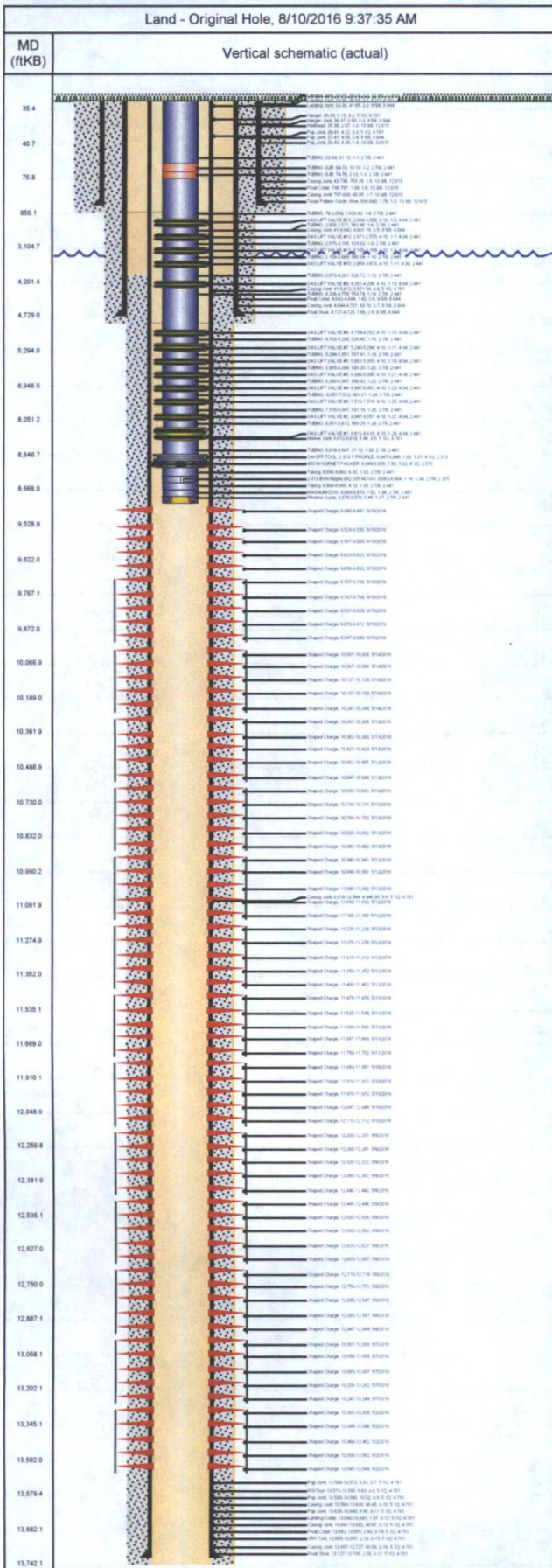
Rod Strings			
Rod Description	Planned Run?	Set Depth (ftKB)	Set Depth (TVD) (ftKB)
Run Date	Run Job	Pull Date	Pull Job

Rod Components							
Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)



Wellbore Schematic

Well Name SALADO DRAW EA 19 FED P6 006H	Lease Salado Draw EA 19 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent
--	-----------------------------------	-------------------------------	--------------------------------



Job Details						
Job Category			Start Date		Rig/Unit End Date	
Completion			4/20/2016		6/9/2016	
Completion			6/7/2016			
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	840	
Intermediate Casing 1	9 5/8	40.00	HCK-55	LT&C	4,729	
Production Casing	5 1/2	20.00	P-110	TXP BTC	13,730	
Tubing Strings						
Tubing - Production set at 8,670.3ftKB on 6/8/2016 16:00						
Tubing Description			Run Date	String Length (ft)	Set Depth (MD) (ftKB)	
Tubing - Production			6/8/2016	8,637.75	8,670.3	
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Btm (ftKB)
TUBING	1	2 7/8	6.50	L-80	31.10	63.6
TUBING SUB	1	2 7/8	6.50	L-80	10.10	73.7
TUBING SUB	1	2 7/8	6.50	L-80	2.13	75.8
TUBING	62	2 7/8	6.50	L-80	1,928.43	2,004.3
GAS LIFT VALVE #13	1	4.335			4.10	2,008.4
TUBING	18	2 7/8	6.50	L-80	562.45	2,570.8
GAS LIFT VALVE #12	1	4.335			4.10	2,574.9
TUBING	17	2 7/8	6.50	L-80	529.63	3,104.5
GAS LIFT VALVE #11	1	4.335			4.10	3,108.6
TUBING	18	2 7/8	6.50	L-80	560.04	3,668.7
GAS LIFT VALVE #10	1	4.335			4.10	3,672.8
TUBING	17	2 7/8	6.50	L-80	528.72	4,201.5
GAS LIFT VALVE #9	1	4.335			4.10	4,205.6
TUBING	18	2 7/8	6.50	L-80	553.74	4,759.3
GAS LIFT VALVE #8	1	4.335			4.10	4,763.4
TUBING	17	2 7/8	6.50	L-80	526.45	5,289.9
GAS LIFT VALVE #7	1	4.335			4.10	5,294.0
TUBING	18	2 7/8	6.50	L-80	557.41	5,851.4
GAS LIFT VALVE #6	1	4.335			4.10	5,855.5
TUBING	17	2 7/8	6.50	L-80	530.20	6,385.7
GAS LIFT VALVE #5	1	4.335			4.10	6,389.8
TUBING	18	2 7/8	6.50	L-80	556.82	6,946.6
GAS LIFT VALVE #4	1	4.335			4.10	6,950.7
TUBING	18	2 7/8	6.50	L-80	561.21	7,511.9
GAS LIFT VALVE #3	1	4.335			4.10	7,516.0
TUBING	17	2 7/8	6.50	L-80	531.18	8,047.2
GAS LIFT VALVE #2	1	4.335			4.10	8,051.3
TUBING	18	2.785	6.50	L-80	560.25	8,611.6
GAS LIFT VALVE #1	1	4.335			4.10	8,615.7
TUBING	1	2 7/8	6.50	L-80	31.12	8,646.8
ON-OFF TOOL, 2.313 X PROFILE	1	4 1/2			1.83	8,648.6
450 W HORNET PACKER	1	4 1/2			7.80	8,656.4
Tubing	1	2 7/8	6.40	L-80	6.30	8,662.7
2.313 BXN Nipple W/2.205 NO-GO	1	2 7/8			1.16	8,663.9
Tubing	1	2 7/8	6.40	L-80	4.10	8,668.0
MAGNUM DISK	1	2 7/8			1.82	8,669.8
Wireline Guide	1	2 7/8			0.46	8,670.3
Perforations						
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone	
5/15/2016	9,490.0	9,491.0	6.0	6	Upper Avalon Shale, Original Hole	
5/15/2016	9,529.0	9,530.0	6.0	6	Upper Avalon Shale, Original Hole	
5/15/2016	9,587.0	9,589.0	6.0	12	Upper Avalon Shale, Original Hole	
5/15/2016	9,620.0	9,622.0	6.0	12	Upper Avalon Shale, Original Hole	
5/15/2016	9,650.0	9,652.0	6.0	12	Upper Avalon Shale, Original Hole	



Wellbore Schematic

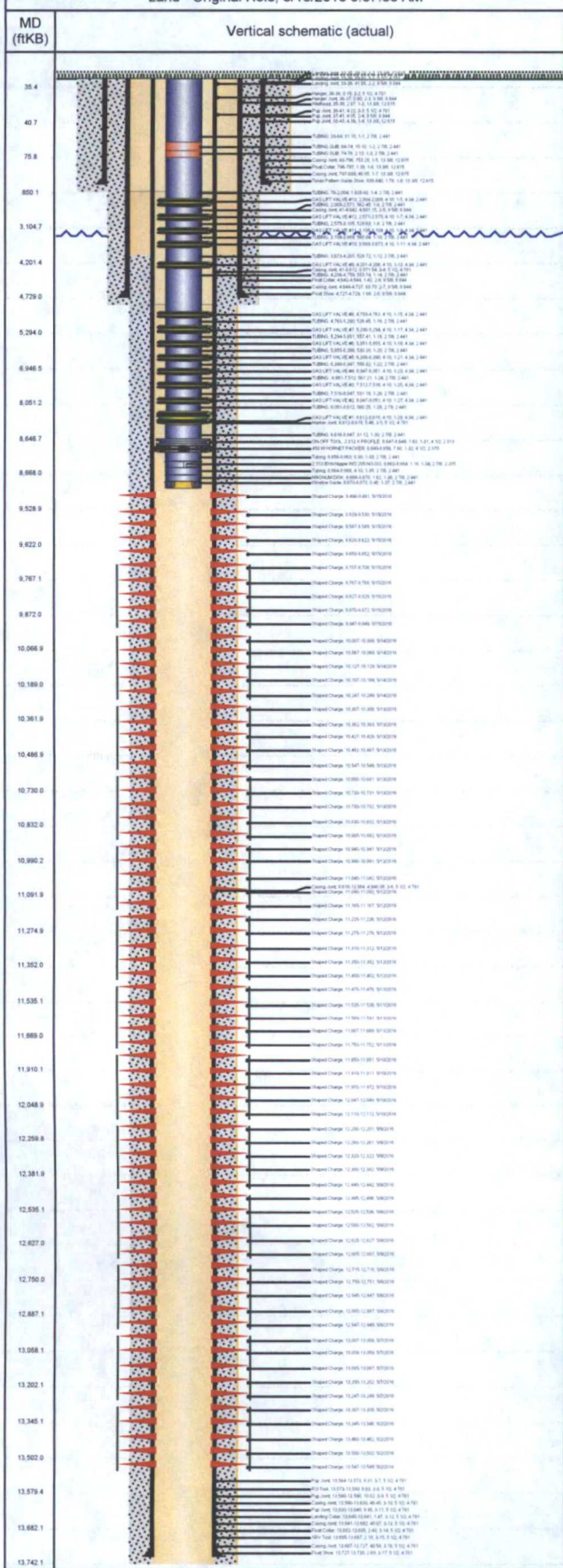
Well Name
SALADO DRAW EA 19 FED P6 006H

Lease
Salado Draw EA 19 Fed P6

Field Name
WILDCAT (HOBBS)

Business Unit
Mid-Continent

Land - Original Hole, 8/10/2016 9:37:36 AM



Perforations

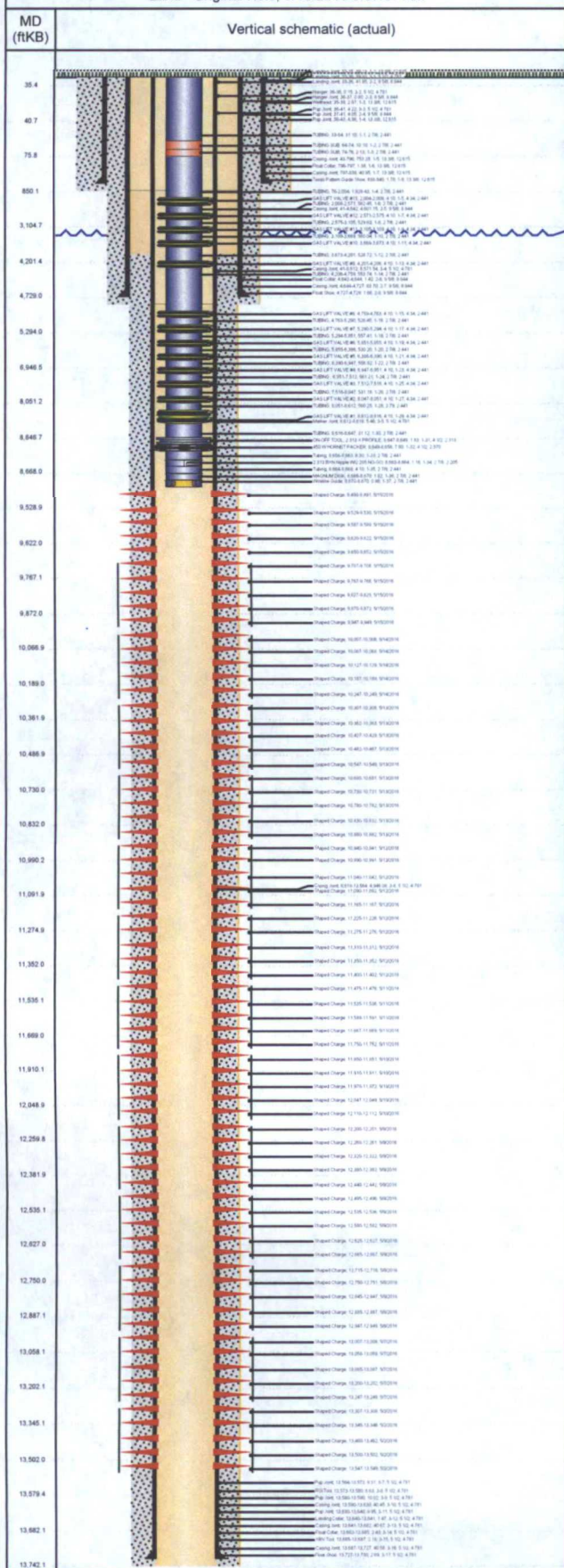
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
5/15/2016	9,707.0	9,708.0	6.0	6	Upper Avalon Shale, Original Hole
5/15/2016	9,767.0	9,768.0	6.0	6	Upper Avalon Shale, Original Hole
5/15/2016	9,827.0	9,829.0	6.0	12	Upper Avalon Shale, Original Hole
5/15/2016	9,870.0	9,872.0	6.0	12	Upper Avalon Shale, Original Hole
5/15/2016	9,947.0	9,949.0	6.0	12	Upper Avalon Shale, Original Hole
5/14/2016	10,007.0	10,008.0	6.0	6	Upper Avalon Shale, Original Hole
5/14/2016	10,067.0	10,068.0	6.0	6	Upper Avalon Shale, Original Hole
5/14/2016	10,127.0	10,129.0	6.0	12	Upper Avalon Shale, Original Hole
5/14/2016	10,187.0	10,189.0	6.0	12	Upper Avalon Shale, Original Hole
5/14/2016	10,247.0	10,249.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,307.0	10,308.0	6.0	6	Upper Avalon Shale, Original Hole
5/13/2016	10,362.0	10,363.0	6.0	6	Upper Avalon Shale, Original Hole
5/13/2016	10,427.0	10,429.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,482.0	10,487.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,547.0	10,549.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,680.0	10,681.0	6.0	6	Upper Avalon Shale, Original Hole
5/13/2016	10,730.0	10,731.0	6.0	6	Upper Avalon Shale, Original Hole
5/13/2016	10,780.0	10,782.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,830.0	10,832.0	6.0	12	Upper Avalon Shale, Original Hole
5/13/2016	10,880.0	10,882.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	10,940.0	10,941.0	6.0	6	Upper Avalon Shale, Original Hole
5/12/2016	10,990.0	10,991.0	6.0	6	Upper Avalon Shale, Original Hole
5/12/2016	11,040.0	11,042.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	11,090.0	11,092.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	11,165.0	11,167.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	11,225.0	11,226.0	6.0	6	Upper Avalon Shale, Original Hole
5/12/2016	11,275.0	11,276.0	6.0	6	Upper Avalon Shale, Original Hole
5/12/2016	11,310.0	11,312.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	11,350.0	11,352.0	6.0	12	Upper Avalon Shale, Original Hole
5/12/2016	11,400.0	11,402.0	6.0	12	Upper Avalon Shale, Original Hole
5/11/2016	11,475.0	11,476.0	6.0	6	Upper Avalon Shale, Original Hole
5/11/2016	11,535.0	11,536.0	6.0	6	Upper Avalon Shale, Original Hole
5/11/2016	11,589.0	11,591.0	6.0	12	Upper Avalon Shale, Original Hole
5/11/2016	11,667.0	11,669.0	6.0	12	Upper Avalon Shale, Original Hole
5/11/2016	11,750.0	11,752.0	6.0	12	Upper Avalon Shale, Original Hole
5/10/2016	11,850.0	11,851.0	6.0	6	Upper Avalon Shale, Original Hole
5/10/2016	11,910.0	11,911.0	6.0	6	Upper Avalon Shale, Original Hole
5/10/2016	11,970.0	11,972.0	6.0	12	Upper Avalon Shale, Original Hole
5/10/2016	12,047.0	12,049.0	6.0	12	Upper Avalon Shale, Original Hole
5/10/2016	12,110.0	12,112.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,200.0	12,201.0	6.0	6	Upper Avalon Shale, Original Hole
5/9/2016	12,260.0	12,261.0	6.0	6	Upper Avalon Shale, Original Hole
5/9/2016	12,320.0	12,322.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,380.0	12,382.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,440.0	12,442.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,495.0	12,496.0	6.0	6	Upper Avalon Shale, Original Hole
5/9/2016	12,535.0	12,536.0	6.0	6	Upper Avalon Shale, Original Hole
5/9/2016	12,580.0	12,582.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,625.0	12,627.0	6.0	12	Upper Avalon Shale, Original Hole
5/9/2016	12,665.0	12,667.0	6.0	12	Upper Avalon Shale, Original Hole
5/8/2016	12,715.0	12,716.0	6.0	6	Upper Avalon Shale, Original Hole
5/8/2016	12,750.0	12,751.0	6.0	6	Upper Avalon Shale, Original Hole
5/8/2016	12,845.0	12,847.0	6.0	12	Upper Avalon Shale, Original Hole
5/8/2016	12,885.0	12,887.0	6.0	12	Upper Avalon Shale, Original Hole
5/8/2016	12,947.0	12,949.0	6.0	12	Upper Avalon Shale, Original Hole
5/7/2016	13,007.0	13,008.0	6.0	6	Upper Avalon Shale, Original Hole
5/7/2016	13,058.0	13,059.0	6.0	6	Upper Avalon Shale, Original Hole
5/7/2016	13,085.0	13,087.0	6.0	12	Upper Avalon Shale, Original Hole



Wellbore Schematic

Well Name SALADO DRAW EA 19 FED P6 006H	Lease Salado Draw EA 19 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent
--	-----------------------------------	-------------------------------	--------------------------------

Land - Original Hole, 8/10/2016 9:37:37 AM



Perforations

Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
5/7/2016	13,200.0	13,202.0	6.0	12	Upper Avalon Shale, Original Hole
5/7/2016	13,247.0	13,249.0	6.0	12	Upper Avalon Shale, Original Hole
5/2/2016	13,307.0	13,308.0	6.0	6	Upper Avalon Shale, Original Hole
5/2/2016	13,345.0	13,346.0	6.0	6	Upper Avalon Shale, Original Hole
5/2/2016	13,460.0	13,462.0	6.0	12	Upper Avalon Shale, Original Hole
5/2/2016	13,500.0	13,502.0	6.0	12	Upper Avalon Shale, Original Hole
5/2/2016	13,547.0	13,549.0	6.0	12	Upper Avalon Shale, Original Hole

Other Strings

Run Date	Pull Date	Set Depth (ftKB)	Com

Other In Hole

Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Composite Frac Plug (drop ball)	9,668.0	9,670.0	5/15/2016	5/19/2016	Stage 14
Composite Frac Plug (drop ball)	9,977.0	9,979.0	5/15/2016	5/19/2016	Stage 13
Composite Frac Plug (drop ball)	10,277.0	10,279.0	5/14/2016	5/19/2016	Stage 12
Composite Frac Plug (drop ball)	10,600.0	10,602.0	5/13/2016	5/19/2016	Stage 11
Composite Frac Plug (drop ball)	10,910.0	10,912.0	5/13/2016	5/19/2016	Stage 10
Composite Frac Plug (drop ball)	11,195.0	11,197.0	5/12/2016	5/19/2016	Stage 9
Composite Frac Plug (drop ball)	11,440.0	11,442.0	5/12/2016	5/19/2016	Stage 8
Composite Frac Plug (drop ball)	11,818.0	11,820.0	5/11/2016	5/19/2016	Stage 7 - Moved up 3 ft
Composite Frac Plug (drop ball)	12,170.0	12,172.0	5/10/2016	5/19/2016	Stage 6
Composite Frac Plug (drop ball)	12,468.0	12,470.0	5/9/2016	5/19/2016	Stage 5 - Move up 2 ft due to collar
Composite Frac Plug (drop ball)	12,690.0	12,692.0	5/9/2016	5/19/2016	Stage 4
Composite Frac Plug (drop ball)	12,977.0	12,979.0	5/8/2016	5/19/2016	Stage 3
Composite Frac Plug (drop ball)	13,277.0	13,279.0	5/7/2016	5/20/2016	Stage 2

SD EA 19 FED P6 #006H

PERF & FRAC INFORMATION

STAGE 1: 13547, 13500, 13460, 13345, 13307

6 spf, .41 dia hole. Total bbls pmpd: 315 bbls, Max Pressure: 6865 psi

PUMP STAGE 1:

Sand in formation 419,808 lbs 100% Equalize/open well @ 1097 psi. Avg Rate 82.4 bpm.
Avg press: 5206 psi. Max Rate: 85.8 bpm Max Press: 8642 psi. ISIP: 1852 psi
Pump Time 99 mins Total clean fluid 9245 bbls Total slurry volume 9699 bbls
Sand pumped: Sand 100 – 32,220 lbs Sand 40/70 – 389,275 lbs TOTAL: 421,495 lbs

STAGE 2: 13247, 13200, 13085, 13058, 13007

6 jsfp, .41 dia hole. Total bbls pmpd: 326 bbls, max pressure 2048 psi

PUMP STAGE 2:

Sand in formation 419,808 lbs: 100%
Equalize/open well @ 1234 psi. Avg Rate: 86.0 bpm Avg Pressure 5815 psi
Max rate: 90.5 bpm Max Pressure 8415 psi ISIP 2087 psi
Pump Time: 142 mins. Total clean fluid: 9285 bbls Total Slurry volume: 9738 bbls
Sand pumped: Sand 100 – 32,342 lbs, Sand 40/70: 387,772 lbs TOTAL: 420,114 lbs

STAGE 3: 12947, 12885, 12845, 12750, 12715

6 jsfp, .41 dia hole. Total bbls pmpd: 235 bbls. Max pressure: 2112 psi

PUMP STAGE 3

Sand in formation 419,808 lbs, 100%
Equalize/open well @ 1440 psi. Ave Rate: 88.7 bpm Ave Pressure: 6099 psi
Max Rate: 90.3 bpm, Max Pressure: 8742 psi. ISIP: 2187 psi.
Pump Time: 113 mins. Total clean fluid: 9012 bbls. Total slurry volume: 9463 bbls
Sand Pumped: Sand 100 – 33,411 lbs, Sand 40/70: 385,232 lbs. TOTAL: 418,643 lbs

STAGE 4: 12665, 12625, 12580, 12535, 12495

6 JSPF, .41 dia hole. Max press of 2604 psi w/245 bbls pumped.

PUMP STAGE 4:

Sand in formation 299,975 lbs, 100%
Equalize/open well @ 1497 psi. Avg Rate: 90.2 bpm, Avg Pressure: 5914 psi.
Max Rate: 91.2 bpm, Max Pressure: 8800 psi. ISIP: 2231 psi.
Pump Time: 113 mins. Total clean fluid: 6655 bbls, Total slurry volume: 6979 bbls
Sand pumped: Sand 100: 19,945 lbs, Sand 40/70 281,174 lbs, TOTAL: 301,119 lbs

STAGE 5: 12440, 12380, 12320, 12260, 12200

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. . Max pressure of 2720 psi w/245 bbls pumped.

PUMP STAGE 5:

Sand in formation: 419,808 lbs, 96%,
Equalize/open well @ 1287 psi. Ave Rate: 85.8 bpm, Avg pressure: 5931 psi
Max Rate: 86.0 bpm, Max Pressure: 8796 psi. ISIP: 2111 psi.
Pump Time: 120 mins. Total clean fluid: 8610 bbls, Total Slurry volume: 9044 bbls
Sand pumped: Sand 100: 30,629 lbs, Sand 40/70: 370,869 lbs, TOTAL: 403,498 lbs

STAGE 6: 12109, 12047, 11970, 11913, 11850

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Pressure of 2708 psi w/228 bbls pumped.

PUMP STAGE 6:

Sand in formation: 470,016 lbs, 100%. Equalize/open well @ 1449 psi. Ave Rate: 90.4 bpm, Ave Pressure: 5410 psi.

Max rate: 91.1 bpm, Max Pressure: 8310 psi. ISIP: 2025 psi.

Pump time: 118 mins. Total clean fluid: 9910 bbls, Total Slurry volume: 10,417 bbls

Sand pumped: sand 100: 32,618 lbs, sand 40/70: 437,932 lbs. TOTAL: 470,550 lbs

STAGE 7: 11750, 11667, 11589, 11535, 11475

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. . Max pressure of 2100 psi w/178 bbls pumped.

PUMP STAGE 7:

Sand in formation: 470,016 lbs, 100 %, Equalize/open hole @ 1699 psi. Ave rate: 85.9 bpm, Ave Pressure: 5375 psi

Max rate: 86.4 bpm, Max Pressure: 8474 psi. ISIP: 2495 psi.

Pump time: 118 mins. Total clean fluid: 9735 bbls, Total slurry volume: 10,240 bbls.

Sand Pumped: Sand 100: 32,858 lbs, Sand 40/70: 436,435 lbs, TOTAL: 469,293 lbs

STAGE 8: 11400, 11350, 11310, 11275, 11225

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max pressure of 2703 psi w/170 bbls pumped.

PUMP STAGE 8:

Sand in formation: 299,975 lbs, 100%, Equalize/open hole @ 1826 psi. Ave Rate: 90.0 bpm, Ave pressure: 5890 psi

Max Rate: 90.0 bpm, Max pressure: 8063 psi. ISIP: 2173 psi.

Pump time: 118 mins. Total clean fluid: 6723 bbls, Total slurry volume: 7047 bbls

Sand pumped: Sand 100: 20,088 lbs, Sand 40/70: 280,427 lbs. TOTAL 300,515 lbs

STAGE 9: 11165, 11090, 11040, 10990, 10940

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max pressure of 2551 psi w/141 bbls pumped.

PUMP STAGE 9:

Sand in Formation: 419,808 lbs, 100% Equalize/open well @ 1857psi. Ave Rate: 90.0 bpm, Ave Pressure: 5095 psi.

Max rate: 90.0 bpm, Max pressure: 8392 psi. ISIP: 2191 psi.

Pump time: 118 mins. Total Clean fluid: 8827 bbls, Total slurry volume: 9279 bbls

Sand pumped: Sand 100: 32,691 lbs, Sand 40/70: 387,247 lbs. TOTAL: 419,938 lbs

STAGE 10: 10880, 10830, 10780, 10730, 10680

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max press of 2184 psi w/119 bbls pumped.

PUMP STAGE 10:

Sand in formation: 419,808 lbs, 100%

Equalize/open well @ 1755 psi. Ave Rate: 85.6 bpm, Ave Pressure: 4879 psi.

Max Rate: 86.0 bpm, Max pressure: 8205 psi. ISIP: 2246 psi.

Pump time: 118 mins. Total clean fluid: 8844 bbls, Total slurry volume: 9297 bbls

Sand pumped: Sand 100: 32,648 lbs, Sand 40/70: 388,435 lbs. TOTAL 421,083 lbs

STAGE 11: 10547, 10482, 10427, 10362, 10307

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Press 2254 psi w/173 bbls pumped.

PUMP STAGE 11:

Sand in formation: 470,016 lbs, 100%,
Equalize/open well @ 1615 psi. Ave Rate: 90.0 bpm. Ave Pressure: 4985 psi.
Max rate: 90.0 bpm, Max pressure: 8166 psi. ISIP: 2236 psi.
Pump time: 118 mins. Total clean fluid: 9829 bbls, total slurry volume 10,332 bbls.
Sand pumped: Sand 100: 32,905 lbs, Sand 40/70: 434,794 lbs, TOTAL: 467,699 lbs

STAGE 12: 10247, 10187, 10127, 10067, 10007

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Pressure of 1989 psi w/89 bbls pmped.

PUMP STAGE 12:

Sand in formation: 419,808 lbs, 100% Equalize/open well @ 1483psi. Ave Rate: 85.0 bpm, Ave pressure: 5310 psi
Max rate: 86.0 bpm, Max pressure: 8717 psi, ISIP: 2243 psi.
Pump time: 126 mins, Total clean fluid: 8839 bbls, Total slurry volume: 9291 bbls.
Sand pumped: Sand 100: 32,799 lbs, Sand 40/70: 387,307 lbs, TOTAL: 420,106 lbs.

STAGE 13: 9947, 9870, 9827, 9767, 9707

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max pressure of 2363 psi w/77 bbls pumped.

PUMP STAGE 13:

Sand in formation: 419,808 lbs, 100%,
Equalize/open well @ 1883 psi. Ave Rate: 85.2 bpm, Ave Pressure: 4871 psi.
Max Rate: 86.4 bpm, Max Pressure: 8178 psi. ISIP: 2292 psi.
Pump time: 72 mins. Total clean fluid: 8831 bbls, Total slurry volume: 9282 bbls.
Sand pumped: Sand 100: 32,520 lbs, Sand 40/70: 385,813 lbs TOTAL: 418,333 lbs

STAGE 14: 9650, 9620, 9587, 9529, 9490

6 JSPF, .41 dia hole. Pump down @ 15 bpm. Max press of 2323 psi w/54 bbls pumped.

PUMP STAGE 14:

Sand in formation: 300,050 lbs 100%. Equalize/open hole W 1972 psi. Ave rate: 90.0 bpm, Ave Press: 5505 psi
Max Rate: 90.0bpm, Max pressure: 8306 psi. ISIP: 2426 psi.
Pump time: 90 mins. Total clean fluid: 6690 bbls, Total slurry volume: 7013 bbls.
Sand pumped: Sand 100: 19,966 lbs, Sand 40/70: 280,081 lbs, TOTAL 300,047 lbs.