Approved by:

Approval Date:

Petroleum Engineer

Title:

been complied with and that the information given above is true and

Phone

432-687-7375

complete to the best of my knowledge and belief.

Signature

Title:

Date:

Printed name:

E-mail Address: Leakejd@chevron.com

DENISE PINKERTON

REGULATORY SPECIALIST

09/07/2016

HOBBS OCD

Form 3160-4 (August 2007)

UNITED STATES SEP 1 2 2018 PEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG Lease Serial No NMNM27506 Oil Well 6. If Indian, Allottee or Tribe Name 1a. Type of Well ☐ Gas Well ☐ Dry ☐ Other b. Type of Completion New Well ■ Work Over Diff. Resvr. Deepen ☐ Plug Back 7. Unit or CA Agreement Name and No. Other Contact: DENISE PINKERTON Lease Name and Well No Name of Operator CHEVRON U.S.A. INC E-Mail: leakejd@chevron.com SD EA 18 FED P6 005H 6301 DEAUVILLE BLVD API Well No 3. Address 3a. Phone No. (include area code) Ph: 432-687-7375 MIDLAND, TX 79706 30-025-42795 Field and Pool, or Exploratory WILDCAT; BONE SPRING Location of Well (Report location clearly and in accordance with Federal requirements)\*
 Sec 19 T26S R33E Mer NMP
 At surface 266FNL 1778FEL Sec., T., R., M., or Block and Survey or Area Sec 19 T26S R33E Mer NMP Sec 18 T26S R33E Mer NMP 374FNL 2312FEL At top prod interval reported below Sec 18 T26S R33E Mer NMP 12. County or Parish 13. State 374FNL 2312FEL LEA At total depth 14. Date Spudded 01/27/2016 15. Date T.D. Reached 16. Date Completed 17. Elevations (DF, KB, RT, GL)\* 3205 GI 04/09/2016 18. Total Depth: MD 14214 19. Plug Back T.D. MD 14115 20. Depth Bridge Plug Set: MD TVD 9153 TVD **TVD** 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL No No No Was well cored? Yes (Submit analysis) 22 Yes (Submit analysis)
Yes (Submit analysis) Was DST run? Directional Survey? Yes (Submit analysis) 23. Casing and Liner Record (Report all strings set in well) Bottom Stage Cementer No. of Sks. & Slurry Vol. Top Size/Grade Wt. (#/ft.) Cement Top\* Amount Pulled Hole Size (MD) (MD) Depth Type of Cement (BBL) 54.5 1006 0 17.500 13.375 J-55 851 12.250 9.625 HCK-55 40.0 4721 1527 0 8.750 5.500 P-110 20.0 14204 1691 4035 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 8746 8776 26. Perforation Record 25. Producing Intervals Perforated Interval Size No. Holes Perf. Status Formation Top Bottom **BONE SPRING** 9619 PRODUCING \*\*\*\*DETAILED PERF 14015 9619 TO 14015 A) B) C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Amount and Type of Material 9619 TO 14015 FRAC W/TOTAL SAND (SAND 100 & SAND 40/70) = 6,008,031 LBS 28. Production - Interval A Date First Oil Gravity Test Hours Test Oil Water Gas Production Method Produced Tested BBI MCF BBL Corr. API Gravity Choke Tbg. Press Csg. 24 Hr Oil Gas Water Gas Oil Well Status Press Flwg Rate BBL BBL Ratio Size 28a. Production - Interval B Oil Gravity Production Method Date First Hours Oil Water Gas Test Test Tested BBL MCF BBL Produc Corr. API Gravity Date FLOWS FROM WELL 684 0 390 0 07/25/2016 24 1461 0 Choke Gas MCF Water Gas:Oil Well Status Tbg. Press Csg. 24 Hr 807 BBL BBL Size Flwg Press Rate Ratio 32/64" 2136 POW

28b. Proc	duction - Interv	/al C									4
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. Proc	duction - Interv	al 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. Dispo	osition of Gas(	Sold, used	for fuel, ven	nted, etc.)							
30. Sumr	nary of Porous	Zones (In	nclude Aquif	ers):					31. Fo	ormation (Log) Markers	
tests,	all important including dep ecoveries.	zones of p th interval	orosity and of tested, cush	contents there ion used, time	eof: Cored e tool oper	intervals an n, flowing ar	d all drill-stem nd shut-in pres	sures			
	Formation		Тор	Bottom		Descript	tions, Contents	, etc.		Name	Top Meas. Depth
BRUSHY BONE SF UPPER A	NYON CANYON CANYON PRING LIME	(include p	710 2940 4740 4760 5870 7525 8980 9030	2939 4739 4759 5869 7524 8979 9029 14214	Al LI Si Si LI	NHYDRITE NHYDRITE MESTONE ANDSTONI ANDSTONI ANDSTONI HALE	E E		C L B C B	USTLER ASTILE ASTILE AMAR ELL CANYON HERRY CANYON RUSHY CANYON ONE SPRING LIME PPER AVALON	710 2940 4740 4760 5870 7525 8980 9030
1. El 5. Su	e enclosed atta lectrical/Mechandry Notice for by certify that	anical Log or pluggin	g and cemen	t verification	ission #35	0283 Verifi	nalysis	M Well In	formation S	ele records (see attached instruc	tions):
Name	e (please print)	DENISE	PINKERTO		or CHEV	KUN U.S.A			ITTING SPI	ECIALIST	
	ature	(Flactro	nic Submiss	(nois			-	te 09/07/2	2016		

SEP 1 82010RY Do not use this abandoned well	NOTICES AND REPORTS s form for proposals to drill I. Use form 3160-3 (APD) for  PLICATE - Other instructions  Contact: DEN E-Mail: leakejd@chevrol 3b. Ph:	ON WELLS or to re-enter an r such proposals. s on reverse side.	8. Well SD 9. API 30-10. Fie BO	OMB N Expires: se Serial No. INM27506	ement, Name and/or No.  6 005H  Exploratory  and State
12. CHECK APPR	ROPRIATE BOX(ES) TO INI	DICATE NATURE OF 1	NOTICE, REPORT	, OR OTHE	R DATA
TYPE OF SUBMISSION		TYPE O	FACTION		
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Star	rt/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation		■ Well Integrity
Subsequent Report	☐ Casing Repair	■ New Construction	☐ Recomplete		Other Drilling Operations
☐ Final Abandonment Notice	☐ Change Plans	□ Plug and Abandon	□ Temporarily Ab	andon	Drining Operations
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for fi 01/27/2016: SPUD WELL @ 01/28/2016: RUN 13 3/8", 54. 810'. NOTIFIED PAUL FLOWI PSI. PMP 40 BBLS SPACER FINAL CIRC PRESS PRIOR TO 03/30/2016: TEST BOPE TO 2	illy or recomplete horizontally, give s k will be performed or provide the Broperations. If the operation results in andonment Notices shall be filed only nal inspection.)  12:00 HRS.DRILL SURFACE  5#, J-55 STC CSG @ 851'. TA  ERS, BLM, @ 19:51 HRS OF @ 8.3 PPG. MIX & PUMP 100  O BUMPING PLUG 332 PSI (	ubsurface locations and measure ond No. on file with BLM/BI/n a multiple completion or receivery after all requirements, included HOLE 112-375, 435, 650 AG BTM @ 861. CSG SI INTENT TO RUN CSG. 16 SX CMT @ 14.8PPG. @ 2.2 BPM. 110 BBLS C	Treed and true vertical dep.  Required subsequent pumpletion in a new interling reclamation, have be completed.  Representation of the complete of the complet	oths of all pertir reports shall be val, a Form 316 een completed,	nent markers and zones. filed within 30 days 60-4 shall be filed once and the operator has
DRILL INTERMEDIATE HOLE					
04/01/2016: RAN 9 5/8", HCK PRESS TEST LINES TO 500	:-55,40# CSG @ 4721'. FS @ PSI LOW & 5000 PSI HIGH. I	4721. FC @ 4636. PMP 40 BBLS DYED FV	V SPACER. MIX & F	PUMP 1066	SX
14. I hereby certify that the foregoing is	true and correct. Electronic Submission #35021 For CHEVRON	I2 verified by the BLM We U.S.A. INC., sent to the I	II Information System	n	
Name (Printed/Typed) DENISE P	INKERTON	Title PERMI	TTING SPECIALIST	Γ	
Signature (Electronic S	ubmission)	Date 09/07/2	016		
	THIS SPACE FOR F	EDERAL OR STATE	OFFICE USE		
Approved By Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu	itable title to those rights in the subje	Title  Tarrant or lease Office			Date
		Cilier			

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.

#### Additional data for EC transaction #350212 that would not fit on the form

#### 32. Additional remarks, continued

LEAD CMT @ 11.9PPG. MIX & PUMP 461 SX TAIL CMT @ 14.8PPG. FULL RETURNS THROUGHOUT JOB. FINAL CIRC PRESS PRIOR TO BUMPING PLUG 1197 PSI @ 2.5BPM. 230 BBLS/524 SX OF CMT RETURNED TO SURF. CMT IN PLACE @ 20:30 HRS.WOC. TAG CMT @ 4625. PRESS TEST CSG TO 2800 PSI FOR 30 MINS. DRILL 10'NEW FORMATION TO 4741.

DRILL 4741-5470, 7116, 7689, 8219, 8589, 8752, 8933, 9114, 9232, 9379, 9476,9744, 10021, 10360, 10717, 11247, 11605, 12147, 12679, 13139, 13463, 13656, 14009, 14214. (TD REACHED ON 04/09/2016)

04/10/2016: RAN 5 1/2", P-110, 20# CSG @ 14204'. LC @ 14115.
PRESS TEST 500 PSI LOW, 6500 PSI HIGH. CMT W/1691 SX CMT.
FINAL CIRC PRESS 1550 PSI @ 3 BPM. LOST RETURNS @ 220 BBLS INTO DISPL. TOC @ 4035'. CMT IN PLACE @ 11:30. RELEASE RIG 04/11/2016.

ATTACHMENTS: DIRECTIONAL SURVEY, CSG & CMT SUMMARY



## **Casing Summary**

Well Name SALADO DRAW EA	18 FED P6 005H	Lease Salado Draw EA 18 Fed P6	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
		Current RKB Elevation 3,237.60, 12/15/2015		Mud Line Elevation (ft)	Water Depth (ft)

et D	epth (MD) (ftKB)	Set Tension	n (kips)	String No. 13 3/8	ominal OD (in)	String Min Drift (in) 12.469	Cer 9	ntralizers		Scratchers	
lts	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	Wellhead	13 3/8	12.625	54.50	J-55	SECURITION STATE	32	35	2.90	2,730.0	1,130
1	Pup Joint	13 3/8	12.625	54.50	And the second second		35	41	5.53	2,730.0	1,130
	Casing Joint	13 3/8	12.625	54.50			41	810	769.13	2,730.0	1,130
	Float Collar	13 3/8	12.625	54.50	The second second		810	811	1.39	2,730.0	1,130
1	Casing Joint	13 3/8	12.625	54.50			811	850	38.94	2,730.0	1,130
1	Float Shoe	13 3/8	12.625	54.50			850	851	0.68	2,730.0	1,130
	rmediate Casing 1, Pla										DE NO
7	lepth (MD) (ftKB)	Set Tension		String N 9 5/8	ominal OD (in)	String Min Drift (in)	Cer 31	ntralizers		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 Collapsi (psi)
	Hanger	9 5/8	8.835		HCK-55	LT&C	33	35	1.95		2,570
	Pup Jt	9 5/8	8.835		HCK-55	LT&C	35	38	3.26		2,570
_	Casing Joint	9 5/8	8.835		HCK-55	LT&C	38	4,636	4,598.03	9 -	2,570
1	Float Collar	9 5/8	8.835	40.00	HCK-55	LT&C	4,636	4,637	1.49	1	2,570
			8.835	40.00	HCK-55	LT&C	4,637	4,719	82.07		2,570
	Casing Joint	9 5/8	0.033								
1 ro	Casing Joint Float Shoe duction Casing, Plann epth (MD) (ftKB)	9 5/8 9 5/8 ed?-N, 14,204 Set Tensio	8.835 ftKB	40.00 String N	HCK-55	LT&C String Min Drift (in)		4,721	1.63	Scratchers	
1 ro	Float Shoe duction Casing, Plann	9 5/8 ed?-N, 14,204	8.835 ftKB	40.00	HCK-55		Cer 10	ntralizers		Scratchers	P Collans
ro et D 4,2	Float Shoe duction Casing, Plann epth (MD) (ftKB) 204 Item Des	9 5/8 ed?-N, 14,204 Set Tension OD (in)	8.835  ftKB n (kips)  ID (in)	40.00 String N 5 1/2 Wt (lb/ft)	HCK-55		Cet 10 Top Depth (MD) (ftKB)	ntralizers 5 Btm Depth (MD) (ftKB)	Len (ft)	Scratchers P Burst (psi)	P Collaps (psi)
ro et D 4,2	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2	8.835 ftKB n (kips)	40.00 String N 5 1/2 Wt (lb/ft) 20.00	HCK-55	String Min Drift (in)	Top Depth (MD) (ftKB)	htralizers 5 Btm Depth (MD) (ftKB)	Len (ft) 0.70		(psi) 11,100
2 1 ro 4,2 lts 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint	9 5/8 ed?-N, 14,204 Set Tensio OD (in) 5 1/2 5 1/2	8.835 ftKB n (kips) ID (in) 4.778 4.778	40.00 String N 5 1/2 Wt (lb/ft) 20.00 20.00	HCK-55 ominal OD (in) Grade	String Min Drift (in)	Cer 10 Top Depth (MD) (ftKB) 33	ntralizers 5 Btm Depth (MD) (ftKB) 33	Len (ft) 0.70 4.27		(psi) 11,100 11,100
2 1 ro 4,2	Float Shoe  duction Casing, Plann epth (MD) (ftkB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2	8.835 ftKB n (kips)	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00	HCK-55 ominal OD (in) Grade P-110	String Min Drift (in)	Top Depth (MD) (ftKB)	htralizers 5 Btm Depth (MD) (ftKB)	Len (ft) 0.70		(psi) 11,100 11,100
2 1 ro 4,2 lts 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger  Casing Pup Joint  Casing Joint	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2 5 1/2 5 1/2 5 1/2	8.835  ftKB n (kips)  ID (in) 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00	HCK-55 ominal OD (in) Grade P-110 P-110	String Min Drift (in)	Cer 10 Top Depth (MD) (ftKB) 33	htralizers 5 Btm Depth (MD) (ftKB) 33 38 8,712	Len (ft) 0.70 4.27 8,674.38		
2 1 1 7 7 1 1 1 2 0 9	Float Shoe  duction Casing, Plann epth (MD) (ftkB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2 5 1/2 5 1/2	8.835 ftKB n (kips) ID (in) 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00	HCK-55 ominal OD (in) Grade P-110 P-110 P-110	String Min Drift (in)	Cet 100 Top Depth (MD) (ftKB) 33 33	htralizers 5 Btm Depth (MD) (ftKB) 33 38 8,712	Len (ft) 0.70 4.27 8,674.38		(psi) 11,100 11,100 11,100
2 1 ro 4,2 lts 1 1 20 9 1 83	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger  Casing Pup Joint  Casing Pup Joint  Casing Pup Joint	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835  ftKB n (kips)  ID (in) 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00	HCK-55 ominal OD (in) Grade P-110 P-110	String Min Drift (in)	Cet 100 Top Depth (MD) (ftiKB) 33 33 38	htralizers 5 Btm Depth (MD) (ftKB) 33 38 8,712	Len (ft) 0.70 4.27 8,674.38		(psi) 11,100 11,100 11,100
2 1 ro et D 4,2 Jts 1 1 20 9 1 83	Float Shoe  duction Casing, Plann lepth (MD) (ftKB) 204  Item Des  Casing Hanger  Casing Pup Joint  Casing Joint  Casing Pup Joint  Casing Joint  Casing Joint  Casing Joint	9 5/8 ed?-N, 14,204 Set Tensio OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835 ftKB n (kips) ID (in) 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 ominal OD (in) Grade P-110 P-110 P-110	String Min Drift (in)	Cet 100 Top Depth (MD) (ftiKB) 33 33 38 8,712	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23		(psi) 11,100 11,100 11,100
2 1 4,2 Jts 1 1 20 9 1 83	Float Shoe  duction Casing, Plann lepth (MD) (ftKB) 204  Item Des  Casing Hanger  Casing Pup Joint  Casing Pup Joint  Casing Pup Joint  Casing Joint  Casing Joint  Casing Joint  Casing Pup Joint  Casing Pup Joint	9 5/8 ed?-N, 14,204 Set Tension OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835 ftKB ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 ominal OD (in) Grade P-110 P-110 P-110 P-110 P-110	String Min Drift (in)	Cet 100 Top Depth (MD) (ftKB) 33 33 38 8,712 8,723 12,132	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48		(psi) 11,100 11,100 11,100
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2 1 4,2 Jts 1 1 20 9 1 83 46 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger  Casing Pup Joint  Casing Joint  Casing Joint  Casing Pup Joint  RSI  Casing Pup Joint	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	String Min Drift (in)	Cei 10 Top Depth (MD) (ftKB) 33 33 38 8,712 8,723 12,132 14,033 14,043 14,050	htralizers 5 Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20		(psi) 11,100 11,100 11,100
2 1 4,2 Jts 1 1 20 9 1 83 46 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint Casing Joint Casing Joint Casing Pup Joint RSI Casing Pup Joint Casing Pup Joint RSI Casing Pup Joint	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110	String Min Drift (in)	Cer 10 Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060	htralizers 5 Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103	Len (ft) 0.70 4.27 8,674.38  10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96		(psi) 11,100 11,100 11,100
2 1 1 4,2 1 1 20 9 1 83 46 1 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint Casing Joint Casing Joint Casing Pup Joint RSI Casing Pup Joint Casing Pup Joint RSI Casing Pup Joint Casing Pup Joint Casing Pup Joint Landing Collar	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110	String Min Drift (in)	Cer 10 Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17		(psi) 11,100 11,100 11,100
2 1 1 20 4,2 1 1 20 9 1 83 46 1 1 1 1 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint Casing Joint Casing Pup Joint RSI Casing Pup Joint Landing Collar Casing Joint Float Collar	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110	String Min Drift (in)	Top Depth (MD) (ft/KB)  33  38  8,712  8,723  12,132  14,033  14,043  14,050  14,103  14,113  14,115  14,154	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115 14,154 14,156	Len (ft) 0.70 4.27 8,674.38  10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48		(psi) 11,100 11,100 11,100
2 1 2 4,2 3 4,2 1 1 20 9 1 83 46 1 1 1 1 1 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint Casing Joint Casing Joint Casing Pup Joint RSI Casing Pup Joint Casing Pup Joint Casing Pup Joint RSI Casing Pup Joint Casing Joint Casing Joint	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110	String Min Drift (in)	Cer 100 Top Depth (MD) (ft/KB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115 14,154 14,156 14,158	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17		(psi) 11,100 11,100 11,100
2 1 1 20 4,2 1 1 20 9 1 83 46 1 1 1 1 1 1	Float Shoe  duction Casing, Plann epth (MD) (ftKB) 204  Item Des  Casing Hanger Casing Pup Joint Casing Joint Casing Joint Casing Pup Joint RSI Casing Pup Joint Landing Collar Casing Joint Float Collar	9 5/8  ed?-N, 14,204  Set Tensio  OD (in)  5 1/2	8.835 ftKB n (kips)  ID (in) 4.778	40.00  String N 5 1/2  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	P-110	String Min Drift (in)	Top Depth (MD) (ft/KB)  33  38  8,712  8,723  12,132  14,033  14,043  14,050  14,103  14,113  14,115  14,154	Btm Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115 14,154 14,156	Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17 2.45		(psi) 11,100 11,100

HOBBS OCD

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Page 1/1 Report Printed: 8/10/2016



**Surface Casing Cement** 

Well N	ame ADO DRAW EA 18 F	ED P6 005H	Lease Salado Draw	Draw EA 18 Fed P6 Field Name WILDCAT (HOBBS)						Business Unit Mid-Continent		
Groun 3,20		al RKB (ft) 7.60	Current RKB Elev 3,237.60, 12/				M. Link		Mud Line E	levation (ft) Water	er Depth (ft)	
Orig	inal Hole								C. St. W.			
	nal Hole		Directional Type Horizontal			Min Kick Off 8,752.0	Depth (ftKB)	TO SALE	Vertical Sec 354.12	ction Direction (°)	A THE	
o iigi	Hole Size (in		The state of the s	Ac	t Top (ftKB)	0,1102,0			THE RESERVE OF THE PERSON NAMED IN	8tm (ftKB)		
		17 1/2					32.6		Mark Street	aking the kin	861.0	
		12 1/4 8 3/4		Principle of the last			861.0 4,731.0				4,731.0 14,214.0	
Mult	i-bowl, FMC on <dt< td=""><td></td><td></td><td></td><td></td><td></td><td>4,731.0</td><td></td><td></td><td></td><td>14,214.0</td></dt<>						4,731.0				14,214.0	
Sub-T	/pe	anstare				Install Date	C. C. C.					
Multi	-bowl Des		ake	Mo	del		M/D (asi)		Service		CN.	
	Des	FMC	ike	IVIO	uei		WP (psi)	A SERVICE	Service		SN	
Surf	ace, Planned?-N, 8	51ftKB										
Casing	Description	Wellbore Original Hole		Run Date 1/28/2016		Set Depth (	MD) (ftKB)	Stick Up -32.4	(ftKB)	Set Tension (	tips)	
Centra	DESCRIPTION OF STREET	Original Hole		1/20/2010	Control of the Contro	Scratchers		-32.4				
9					<u> </u>		1					
Jts	Item [	es	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	Wellhead		13 3/8	12.625	54.50				2.90	32	35	
1	Pup Joint		13 3/8	12.625	54.50				5.53	35	41	
18	Casing Joint Float Collar		13 3/8 13 3/8	12.625 12.625	54.50 54.50				769.13 1.39	810	810 811	
1	Casing Joint		13 3/8	12.625	54.50		14.2 AUT 1		38.94	811	850	
1	Float Shoe		13 3/8	12.625	54.50	A STATE OF THE PARTY OF THE PAR	1 1 1 1		0.68	850	851	
	mediate Casing 1,	Planned?-N, 4,	THE RESIDENCE OF THE PARTY OF T									
Casing	Description	Wellbore		Run Date		Set Depth (	MD) (ftKB)	Stick Up	(ftKB)	Set Tension (	tips)	
Centra	mediate Casing 1	Original Hole		4/1/2016		4,721 Scratchers		-32.6				
31	1112613	2	1		N. P.	Scratchers	Oka Car		A SEC.		20	
Jts	Item D	)es	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	Hanger		9 5/8	8.835		HCK-55	(117)	LT&C	1.95	33	35	
1	Pup Jt	MALE ALL STATE	9 5/8	8.835	40.00	HCK-55	NO.	LT&C	3.26	35	38	
110	Casing Joint		9 5/8	8.835		HCK-55		LT&C	4,598.03	38	4,636	
1	Float Collar		9 5/8	8.835		HCK-55	The street of	LT&C	1.49	4,636	4,637	
2	Casing Joint Float Shoe		9 5/8	8.835 8.835		HCK-55		LT&C	82.07 1.63	4,637 4,719	4,719 4,721	
	luction Casing, Pla	nned2-N 14 20	AND DESCRIPTIONS OF THE PARTY O	0.000	40.00	HCK-55		LIAC	1.03	4,719	4,721	
_	Description	Wellbore	TILLO	Run Date		Set Depth (	MD) (ftKB)	Stick Up	(ftKB)	Set Tension (	tips)	
THE REAL PROPERTY.	uction Casing	Original Hole		4/10/2016		14,204		-32.7				
Centra 105	alizers					Scratchers						
Jts	Item C	loe.	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	
1	Casing Hanger	Jes .	5 1/2		20.00	Grade	(in)	Top Thread	0.70	33	33	
1	Casing Pup Joint	I SHE	5 1/2	4.778	20.00				4.27	33	38	
209	Casing Joint	THE REAL PROPERTY.	5 1/2			P-110			8,674.38	38	8,712	
1	Casing Pup Joint		5 1/2			P-110			10.92	8,712	8,723	
83	Casing Joint		5 1/2 5 1/2			P-110			3,409.23	8,723	12,132	
46	Casing Joint Casing Pup Joint		5 1/2	A LOSSON STREET, STREE		P-110 P-110			1,900.48 10.36	12,132 14,033	14,033 14,043	
1	RSI		5 1/2	A STREET OF THE PARTY OF THE PA	20.00	-110		Recognition of	6.67	14,043	14,050	
1	Casing Pup Joint		5 1/2	A STATE OF THE PARTY OF THE PAR		P-110			10.20	14,050	14,060	
1	Casing Joint		5 1/2	4.778		P-110		District of	42.96	14,060	14,103	
1	Casing Pup Joint		5 1/2		THE RESERVE OF THE PARTY OF	P-110	March 1		10.19	14,103	14,113	
1	Landing Collar	A STATE OF THE STA	5 1/2			P-110			1.48	14,113	14,115	
1	Casing Joint		5 1/2			P-110			39.17	14,115	14,154	
Party.	Float Collar XRV		5 1/2 5 1/2		20.00	P-110		ESPACE .	2.45	14,154 14,156	14,156	
	VIV		5 1/2	4.778	20.00	The State of the S	The second second	NO BEST OF STREET	2.19	14,156	14,158	
1		Name and Address of the	5 1/2	4 779	20.00	P-110		Constitution in	42.00	14 159	14 201	
1	Casing Joint Float Shoe		5 1/2 5 1/2	A RESIDENCE OF THE PARTY OF THE		P-110 P-110			42.90 2.70	14,158 14,201	14,201 14,204	



**Surface Casing Cement** 

SALADO DRAW EA 18 FED P6 005H		Salado Draw EA 18 Fed P6 WILDCAT (HOBBS)			Mid-Continent			
	nal RKB (ft) 37.60	Current RKB Elevation 3,237.60, 12/15/					Mud Line Elevation (ft)	Water Depth (ft)
Surface Casing Cemen	t, Casing, 1/28	/2016 16:17						
Cementing Start Date 1/28/2016			menting End Date 28/2016		Wellbore Original Hole			
Evaluation Method Returns to Surface		Cement Evaluation Re Full returns	esults					
Comment Tested service lines to 3 500 over final circulating				1006 sx) of tail ce	ment, displaced	with 125 bbl	of 8.34 ppg FW. Bu	imped plug with
1, 32.6-861.0ftKB						San Daniel		
Top Depth (ftKB) 32.6	861.0	Depth (ftKB)	Full Return?	Vol Cement Re 105.0	t (bbl) Top Plug?		Bottom Plug?	
Initial Pump Rate (bbl/min) 4.8	Final Pur 2.2	mp Rate (bbl/min)	Avg Pump Rat 3.5	e (bbl/min)	Final Pump Pri 338.0	essure (psi)	Plug Bump Pre 880.0	essure (psi)
Pipe Reciprocated? N	K. Warner and Make and A. R. Control of the Control		Reciprocation	Reciprocation Rate (spm)		Pipe Rotated?		1)
epth Tagged (MD) (ffKB) Tag Method		nod	Depth Plug Dri	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)		
Spacer							White District	
Fluid Type Spacer	Fluid Des	scription	Quantity (sacks	s)	Class		Volume Pumpe 40.0	ed (bbl)
Estimated Top (ftKB) 32.6	Estimate 32.6	d Bottom Depth (ftKB)	Percent Exces	Percent Excess Pumped (%)		Yield (ft³/sack)		(gal/sack)
Free Water (%)	Density (	lb/gal)	Zero Gel Time	(min)	Thickening Tin	ne (hr)	1st Compressi	ve Strength (psi)
Cement Fluid Additives						Primer and		
	Add		Leave the later	Туре	BREET PL		Conc	
T-11			The second second second	The second second	Designation of the			State of the last
Tail Fluid Type	Fluid Des	ecription	Quantity (sack	e)	Class	ASIR LUCIO	Volume Pumpe	ad (bbl)
Tail	Cemei		1,006	9)	Class		238.0	su (DDI)
Estimated Top (ftKB) 32.6	Estimate 861.0	ed Bottom Depth (ftKB)	Percent Exces 125.0	s Pumped (%)	Yield (ft³/sack) 1.33		Fluid Mix Ratio 6.37	(gal/sack)
Free Water (%)	Density ( 14.80	lb/gal)	Zero Gel Time	(min)	Thickening Tin 4.50	ne (hr)	1st Compressi	ve Strength (psi)
<b>Cement Fluid Additives</b>								
	Add	STUDY BY THE PROPERTY OF		Туре	TEAR OF SHIP COL	PTO NEW YORK	Conc	



#### Intermediate Casing Cement

II Name ALADO DRAW EA 1	IS FED DE COEU	Lease Salado Draw	EA 18 Ecd D6		Field Name	T (HOBBS)		Business I		
und Elevation (ft)	riginal RKB (ft)	Current RKB Eleva	ation		IVVILDOA	I (HUBBS)		THE RESERVE AND ADDRESS OF THE PERSON NAMED IN		ter Depth (ft)
205.00	,237.60	3,237.60, 12/1	15/2015					THE RESERVE		
iginal Hole										
lbore Name iginal Hole		Directional Type Horizontal			Min Kick Off 8,752.0	Depth (ftKB)		354.12	ction Direction (°)	
Hole Size		No. of the	Ac	t Top (ftKB)	No.	TREE		Act I	Btm (ftKB)	
	17 1/2					32.6 861.0		CARL PROPERTY		861
	8 3/4					4,731.0				4,73
ti-bowl, FMC on	The second second second second					4,731.0				14,21
Туре	The second second	SATISFIES S			Install Date			MANAGER MANAGE		
i-bowl Des		ake	Mo	del		M/D (noi)		Sanias		SN
Des	FMC	ake	MO	uei		WP (psi)		Service		SIN
face, Planned?-N	, 851ftKB									
g Description	Wellbore		Run Date		Set Depth (1	MD) (ftKB)		Jp (ftKB)	Set Tension	(kips)
ace	Original Hole	Liberton.	1/28/2016		851 Scratchers	CLINE COLUMN	-32.4			
					o data to loi s		1.5			
Ite	em Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (M (ftKB)
Wellhead	TO SERVICE STREET	13 3/8	12.625	54.50		(11)	. op modu	2.90	32	
Pup Joint		13 3/8	12.625	54.50	J-55	A I	<b>E</b> RESIST	5.53	35	
Casing Joint		13 3/8	12.625	54.50	J-55	100		769.13	41	1
Float Collar	Carolina Carolina	13 3/8	12.625	54.50				1.39	810	
Casing Joint		13 3/8	12.625	54.50	Section 19 Control of the last	536		38.94	811	
Float Shoe	A STATE OF THE STA	13 3/8	12.625	54.50	J-55		PACE N	0.68	850	8
	1, Planned?-N, 4,		Pun Dota		I Sat Doub 0	ADV/AVD)	Chat	In (RVD)	Cat Tanala	(kine)
ng Description rmediate Casing 1	Wellbore Original Hole		Run Date 4/1/2016		Set Depth (1 4,721	(HKB)	-32.6	Jp (ftKB)	Set Tension	(kips)
ralizers	Marine Contract		75		Scratchers					
			106.00	* 15 A	SE SEC	Top Conn Sz	1100 1100		Top Depth (MD)	Btm Depth (M
Ite	na Dan						And the second party of the		Top Deput (IVID)	Dan Dopar (in
Hanger	em Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	(in)	Top Thread	Len (ft)	(ftKB)	(ftKB)
	em Des	9 5/8	8.835	40.00	HCK-55		LT&C	1.95	(ftKB) 33	(ftKB)
Pup Jt	em Des		8.835 8.835	40.00 40.00					(ftKB)	(ftKB)
Pup Jt Casing Joint	em Des	9 5/8 9 5/8	8.835	40.00 40.00 40.00	HCK-55 HCK-55		LT&C LT&C	1.95 3.26	(fiKB) 33	(ftKB)
Pup Jt Casing Joint Float Collar	im Des	9 5/8 9 5/8 9 5/8	8.835 8.835 8.835	40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55		LT&C LT&C LT&C	1.95 3.26 4,598.03	(ftKB) 33 35 38	(fiKB) 4,6 4,6
Pup Jt Casing Joint Float Collar Casing Joint	im Des	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55		LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49	(ftKB) 33 35 38 4,636	(fiKB) 4,6 4,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing,	Planned?-N, 14,20	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(fiKB) 33 35 38 4,636 4,637 4,719	(ftKB) 4,6 4,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing,	Planned?-N, 14,20	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(ftKB) 33 35 38 4,636 4,637	(ftKB) 4,6 4,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, In Description duction Casing duction Casing	Planned?-N, 14,20	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(fiKB) 33 35 38 4,636 4,637 4,719	(ftKB) 4,6 4,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers	Planned?-N, 14,20 Wellbore Original Hole	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension	(ftKB) 4,6 4,6 4,7 (kips)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description luction Casing alizers	Planned?-N, 14,20	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(fiKB) 33 35 38 4,636 4,637 4,719	(ftKB)  4,6  4,7  4,7  (kips)  Btm Depth (M (ftKB)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description Juction Casing alizers	Planned?-N, 14,20  Wellbore Original Hole	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 OD (in)	8.835 8.835 8.835 8.835 8.835 8.835 8.100	40.00 40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB)	(ftKB)  4,6  4,7  4,7  (kips)  Btm Depth (M (ftKB)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers  Ite Casing Hanger Casing Pup Join Casing Joint	Planned?-N, 14,20   Wellbore   Original Hole   Original Hole	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.100	40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	(ftKB)  33  35  38  4,636  4,637  4,719  Set Tension  Top Depth (MD) (ftKB)  33	(ftKB)  4,6  4,7  4,7  (kips)  Btm Depth (M (ftKB)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers  It Casing Hanger Casing Pup Joint Casing Pup Joint Casing Pup Joint	Planned?-N, 14,20   Wellbore   Original Hole   Original Hole	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 0 5 1/2 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Dp (ftKB) 7	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 33 38 8,712	(ftKB)  4,6  4,7  4,7  (kips)  Btm Depth (M (ftKB)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers  It Casing Hanger Casing Pup Joint Casing Pup Joint Casing Joint Casing Joint	Planned?-N, 14,20   Wellbore   Original Hole   Original Hole	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 ID (in) 4.778 4.778 4.778 4.778	40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Dp (ftKB) 7 Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 33 38 8,712 8,723	(ftKB)  4,6  4,7  4,7  (kips)  Btm Depth (M (ftKB)
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers  It Casing Hanger Casing Pup Join Casing Pup Join Casing Joint Casing Joint Casing Joint Casing Joint	Planned?-N, 14,20   Wellbore	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.700 8.700 8.778 4.778 4.778 4.778 4.778 4.778	40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Up (ftKB) 7 Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48	(ftKB) 33 35 38 4,636 4,637 4,719 Set Tension  Top Depth (MD) (ftKB) 33 33 38 8,712 8,723 12,132	(ftKB)  4,6  4,7  4,7  4,7  (kips)  Btm Depth (M (ftKB)  8,7  8,7  12,1
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, in general collection Casing Joint Casing Hanger Casing Pup Joint Casing Pup Joint Casing Joint Casing Joint Casing Joint Casing Joint Casing Pup Joint	Planned?-N, 14,20   Wellbore	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 ID (in) 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Up (ftKB) 7 Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033	(ftKB)  4,6 4,7 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 8,7 12,1 14,1
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, ig Description duction Casing Bulzers  It Casing Hanger Casing Pup Join Casing Pup Join Casing Joint Casing Joint Casing Joint Casing Pup Join Casing Pup Join Casing Pup Join RSI	Planned?-N, 14,20  Wellbore Original Hole  em Des	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (1 14,204 Scratchers Grade P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Up (ffKB) 7 Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67	(ftKB) 33 35 38 4,636 4,637 4,719 Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043	(ftKB)  4,6 4,7 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 8,7 12,1 14,6 14,6
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, Ig g Description duction Casing alizers  It Casing Hanger Casing Pup Join Casing Pup Join Casing Joint Casing Joint Casing Pup Join RSI Casing Pup Join	Planned?-N, 14,20  Wellbore Original Hole  em Des	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 ID (in) 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (1 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Up (ftKB) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 - 10.36 6.67 10.20	(ftkB) 33 35 38 4,636 4,637 4,719 Set Tension  Top Depth (MD) (ftkB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050	(ftKB)  4,6 4,7 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 12,1 14,6 14,6 14,6
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, Ig g Description duction Casing alizers  It Casing Hanger Casing Pup Join Casing Pup Join Casing Joint Casing Joint Casing Pup Join Casing Joint	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (1 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (ftKB) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 - 10.36 6.67 10.20 42.96	(fikB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (fikB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060	(ftKB)  4,6 4,7 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 12,7 14,6 14,6 14,6 14,6 14,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, g Description duction Casing alizers  It Casing Hanger Casing Pup Join Casing Pup Join Casing Joint Casing Joint Casing Pup Join	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (fiKB) 2 2 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19	(fikB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (fikB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103	(ftKB)  4,6 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 12, 14,1 14,1 14,1 14,1
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, In Description duction Casing alizers  Ite Casing Hanger Casing Pup Join Casing Joint Casing Pup Join	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (fiKB) 2, (fiKB) 2, (fiKB) 2, (fiKB) 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113	(ftKB)  4,6 4,7 4,7 4,7 (kips)  Btm Depth (M (ftKB)  8,7 12,7 14,6 14,6 14,6 14,7 14,7 14,7 14,7
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe duction Casing, Ing Description duction Casing Pup Joint Casing Joint	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB  OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (fiKB) 2,500 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113	(ftKB)  4,6 4,7 4,7 4,7 4,7 (kips)  8tm Depth (Mi (ftKB)  14,6 14,6 14,6 14,1 14,1 14,1
Pup Jt Casing Joint Float Collar Casing Joint Float Shoe Cacing Joint Casing Description Casing Hanger Casing Pup Join	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (fiKB) 2, (fiKB)	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113	(ftKB)  4,6 4,6 4,7 4,7 4,7 (kips)  Btm Depth (MI (ftKB)  8,7 12,1 14,0 14,0 14,1 14,1 14,1 14,1
Casing Joint Float Collar Casing Joint Float Shoe Casing Joint Float Shoe Casing Joint Casing Joint Casing Casing Casing Joint Casing Hanger Casing Pup Joint Casing Pup Joint Casing Joint Casing Pup Joint Landing Collar	Planned?-N, 14,20  Wellbore Original Hole  em Des  it	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 14ftKB OD (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	40.00 40.00 40.00 40.00 40.00 40.00 40.00  Wt (lb/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	AD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (fiKB) 7 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17 2.45	(ftKB) 33 35 38 4,636 4,637 4,719  Set Tension  Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115	(fiKB)  4,6 4,6 4,7 4,7 4,7 4,7 (kips)  Btm Depth (Mt (fiKB)  8,7 12,1 14,0 14,0 14,1 14,1 14,1 14,1 14,1



32.6 4,731 Initial Pump Rate (bbl/min) 6.6 2.5 Pipe Reciprocated? N Recipro N Depth Tagged (MD) (ftKB) Tag Me  Spacer Fluid Type Spacer Dyed Estimated Top (ftKB) 32.6 32.6 Free Water (%) Density 8.30  Cement Fluid Additives  Lead Fluid Type Fluid Density 8.30  Cement Fluid Additives  Add  Lead Fluid Type Fluid Density 8.30  Cement Fluid Additives  Fluid Type Fluid Density 8.30  Cement Fluid Additives  Fluid Type Fluid Density 11.90  Cement Fluid Additives  Add  Tail Fluid Type Fluid Density 11.90  Cement Fluid Density 11.90  Cement Fluid Additives  Fluid Type Fluid Density 11.90  Cement Fluid Additives  Add  Tail Fluid Type Fluid Density 11.90  Cement Fluid Additives  Add	Cemed 4/1// Cement Evaluation Resired Full returns  6,000 psi high Lead at11.9 ppg. ail at 14.8 ppg 353 bbl FW culating pressure at 1	enting End Date //2016 suits.  1700 psi.  Full Return?	Pield Name WILDCAT (Ho	Wellbor Origin	nal Hole
Intermediate Casing Cement, Casing Cementing Start Date 4/1/2016  Evaluation Method Returns to Surface Comment Perform cmt job as follows:  - Load lines with 10 BBL dyed FW - Pressure test lines to 500 psi low & 5 - Pump 40 bbls dyed FW spacer - Mix and pump 1066 sx (461 bbls) of I - Mix and pump 461 sx (109 bbl) of Ta - Drop wiper plug and displace cmt w/3 - Bump plug with 500 psi over final circ - Held pressure for 5 min Bled back 2.3 bbl. Floats holding.  Details: - Full returns throughout job Final circulating pressure prior to bun - Cmt in place at 20:30 hrs 4/1/2016  1, 32.6-4,731.0ftKB  Top Depth (ftKB) Bottom A, 731  Initial Pump Rate (bbl/min) 6.6 2.5  Pipe Reciprocated? Recipro	Current RKB Elevation 3,237.60, 12/15/2 g, 4/1/2016 17:30 Ceme 4/1/.  Cement Evaluation Res Full returns  6,000 psi high Lead at11.9 ppg. ail at 14.8 ppg 353 bbl FW culating pressure at 1 mping plug 1197 psi at 1.0 Cepth (ftKB)	enting End Date //2016 suits.  1700 psi.  Full Return?	obls/524 sks of cml	Wellbor Origin	Mud Line Elevation (ft) Water Depth (ft)
Cementing Start Date 4/1/2016 Evaluation Method Returns to Surface Comment Perform cmt job as follows:  - Load lines with 10 BBL dyed FW - Pressure test lines to 500 psi low & 5 - Pump 40 bbls dyed FW spacer - Mix and pump 1066 sx (461 bbls) of I - Mix and pump 461 sx (109 bbl) of Ta - Drop wiper plug and displace cmt w/3 - Bump plug with 500 psi over final circles - Held pressure for 5 min Bled back 2.3 bbl. Floats holding.  Details: - Full returns throughout job Final circulating pressure prior to bun Cmt in place at 20:30 hrs 4/1/2016  1, 32.6-4,731.0ftKB Top Depth (ftKB) 32.6  A,731  Depth Tagged (MD) (ftKB)  Tag Me  Spacer Fluid Type Estimated Top (ftKB) 32.6  Spacer  Fluid Type Estimated Top (ftKB) 32.6  Free Water (%)  Cement Fluid Additives  Add  Tail  Fluid Type  Cement Fluid Additives  Add  Fluid Type  Cement Fluid Additives  Fluid Type  Cement Fluid Additives  Add  Tail  Fluid Type  Fluid D  Cement Fluid Additives  Add  Tail  Fluid Type  Estimated Top (ftKB) 3,587.0  Estimated Top (ftKB) 3,587.0  Estimated Top (ftKB) 3,587.0  Estimated Top (ftKB) 3,587.0  Estimated Top (ftKB) Estimated Top (ftKB) 3,587.0  Estimated Top (ftKB) S,587.0  Estimated Top (ftKB) Estimated To	Cement Evaluation Resi Full returns  6,000 psi high Lead at11.9 ppg. ail at 14.8 ppg 353 bbl FW culating pressure at 1	2016 sults  1700 psi.  at 2.5 bpm 230 t		Origin	e e
Returns to Surface Comment Perform cmt job as follows:  Load lines with 10 BBL dyed FW Pressure test lines to 500 psi low & 5 Pump 40 bbls dyed FW spacer Mix and pump 1066 sx (461 bbls) of I Mix and pump 461 sx (109 bbl) of Ta Drop wiper plug and displace cmt w/3 Bump plug with 500 psi over final circ Held pressure for 5 min. Bled back 2.3 bbl. Floats holding.  Details: Full returns throughout job. Final circulating pressure prior to bun Cmt in place at 20:30 hrs 4/1/2016  1, 32.6-4,731.0ftKB  Tag Depth (ftKB)  32.6  Pipe Reciprocated?  Nobelth Tagged (MD) (ftKB)  Reciprocated Tagged (MD) (ftKB)  Tag Me  Spacer  Sitimated Top (ftKB)  2.5  Free Water (%)  Cement Fluid Additives  Add  Fail  Fluid Type Lead  Sitimated Top (ftKB)  Cement Fluid Additives  Add  Fail  Fluid Type Lead  Sitimated Top (ftKB)	Cement Evaluation Resi Full returns  6,000 psi high Lead at11.9 ppg. ail at 14.8 ppg 353 bbl FW culating pressure at 1	2016 sults  1700 psi.  at 2.5 bpm 230 t		Origin	e e
valuation Method Returns to Surface comment Perform cmt job as follows:  Load lines with 10 BBL dyed FW Pressure test lines to 500 psi low & 5 Pump 40 bbls dyed FW spacer Mix and pump 1066 sx (461 bbls) of I Mix and pump 461 sx (109 bbl) of Ta Drop wiper plug and displace cmt w/3 Bump plug with 500 psi over final circ Held pressure for 5 min. Bled back 2.3 bbl. Floats holding.  Details: Full returns throughout job. Final circulating pressure prior to bun Cmt in place at 20:30 hrs 4/1/2016  1, 32.6-4,731.0ftKB  op Depth (ftKB) 2.5  initial Pump Rate (bbl/min) 5.6  2.5  ipe Reciprocated? I epth Tagged (MD) (ftKB)  Tag Me  Spacer  I luid Type Spacer  Dyed Spacer  Stimated Top (ftKB) 32.6  Cement Fluid Additives  Add  Fall  Liuid Type Final County Scale  Cement Fluid Additives  Add  Fall  Liuid Type Final County Scale Final County Final County Scale Final County Scale Final County Final County Scale Final County Scale Final County Scale Final County Scale Final County Final	Cement Evaluation Resi Full returns  6,000 psi high  Lead at11.9 ppg. ail at 14.8 ppg 353 bbl FW culating pressure at 1	at 2.5 bpm 230 t		t returned to surface	e
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1, 32.6-4,731.0ftKB	1.0	Y	Vol Cement Ret (b		Rotton Divo?
op Depth (ftKB) 32.6 4,731 32.6 4,731 32.6 32.6 32.6 32.6 32.6 32.6 4,731 Final Pi 2.5 Recipro Repth Tagged (MD) (ftKB)  Spacer Luid Type Spacer Luid Type Spacer Spacer Spacer Luid Type Lead Luid Type Lead Suid Type Lead Suid Type Lead Suid Type Lead Spacer Luid Type Luid Luid Type Luid Type Luid Type Luid Luid Type Luid Luid Type Luid Type Luid L	1.0	Y	Vol Cement Ret (b		Rottom Phin?
Add  Add  Add  Add  Add  Add  Add  Add	1.0	Y	TOI COMMON TOUR	hl\ITon Plug?	
September 1 September 2 September 2 September 3 Septem	ump Rate (bbl/min)		230.0	N	Υ
Add  Spacer  Spacer  Luid Type Spacer  Stimated Top (ftKB)  Spacer  Stimated Top (ftKB)  See Water (%)  Seement Fluid Additives  Add  Seement Fluid Additives  Add  Seement Fluid Additives  Seement Fluid Additives  Add  Seement Fluid Additives  Add  Seement Fluid Additives  Fluid Dype Seement Fluid Additives  Add  Seement Fluid Additives  Fluid Dype Seement Fluid Additives  Add  Fail  Seement Fluid Additives  Add  Fail  Seement Fluid Dype Fail  Seement Fluid Additives  Add  Fail  Seement Fluid Dype Fail  Seement F		Avg Pump Rate	(bbl/min)	Final Pump Pressure () 1,197.0	Plug Bump Pressure (psi) 1,700.0
Tag Me   Spacer   Tag Me   Spacer   S	ocation Stroke Length (ft)	Reciprocation R	ate (spm)	Pipe Rotated?	Pipe RPM (rpm)
Iluid Type	thod	Depth Plug Drille	ed Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date
Iluid Type					
Estimated Top (ftKB)	escription	Quantity (sacks)		Class	Volume Pumped (bbl)
### Company of the Image	Spacer ted Bottom Depth (ftKB)	Percent Excess	Pumped (%)	Yield (ft³/sack)	40.0 Fluid Mix Ratio (gal/sack)
Read Lead Luid Type Fluid Density 11.90 Cement Fluid Additives  Lead 50:50 Le					The second second second second
Add	(lb/gal)	Zero Gel Time (ı	nin)	Thickening Time (hr)	1st Compressive Strength (psi)
_ead   Fluid Dye					
Luid Type		No.	Туре		Conc
Valid Type	A PROPERTY.			S. S. L. 1010	
Estimated Top (ftKB)	escription	Quantity (sacks)	100 E 100 E 100 E	Class	Volume Pumped (bbl) 463.0
Fail C-Ne stimated Top (ftKB) 5,587.0 Density 11.90	ted Bottom Depth (ftKB)	Percent Excess	Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
11.90		150.0 Zero Gel Time (i	min)	2.46 Thickening Time (hr)	13.98 1st Compressive Strength (psi)
Add		Zero Ger Time (i	Till 1	Trickening fille (fil)	Tat Compressive diterigui (pai)
Fail         Fluid D           Iail         C-Ne           (stimated Top (ftKB))         Estimated Top (ftKB)           3,587.0         4,587			Туре		Conc
Iuid Type         Fluid D           C-Ne         C-Ne           Isstimated Top (ftKB)         Estimated           8,587.0         4,587	at the same of the		1900		OUTO
Fail         C-Ne           estimated Top (ftKB)         Estimated           3,587.0         4,587				TALL STATE OF THE	
3,587.0 4,587	escription eat	Quantity (sacks)		Class	Volume Pumped (bbl) 109.0
	ted Bottom Depth (ftKB)	Percent Excess 85.0	Pumped (%)	Yield (ft³/sack) 1.33	Fluid Mix Ratio (gal/sack) 6.35
	y (lb/gal)	Zero Gel Time (	min)	Thickening Time (hr)	1st Compressive Strength (psi)
2 14.80 Cement Fluid Additives	)				
Add Additives		7 7 7 7 7	Туре		Conc
The Part of the Pa	21 11	1 0	The state of the s		
Displacement				To.	
	escription	Quantity (sacks)		Class	Volume Pumped (bbl) 352.0
	acement	Percent Excess	Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%) Density 8.30		Zero Gel Time (	min)	Thickening Time (hr)	1st Compressive Strength (psi)



#### **Production Casing Cement**

	Darle Comment				Allies de	44	14-12		oduction Cas	,	
Vell Name SALADO DRAW E	EA 18 FED P6 005H	Lease Salado Draw	EA 18 Fed P6	3		Business Unit Mid-Continent					
ound Elevation (ft) 205.00	Original RKB (ft) 3,237.60	Current RKB Eleva 3,237.60, 12/		16				Mud Line I	Elevation (ft) Water	er Depth (ft)	
iginal Hole		2 12 TO 10 T	OF HEIGHTON				CAUCH TO		VALUE OF STREET		
ellbore Name riginal Hole		Directional Type Horizontal			Min Kick Off 8,752.0	Depth (ftKB)			ction Direction (°)		
0	e Size (in)	Horizontai	Ac	t Top (ftKB)	0,732.0			THE RESERVE OF THE PERSON NAMED IN	354.12 Act Btm (ftKB)		
	17 1/					32.6				861	
	12 1/	AND DESCRIPTION OF THE PERSON NAMED IN				861.0				4,731	
ulti-bowl, FMC	8 3/	4				4,731.0				14,214	
-Туре	on \dunstart				Install Date						
Ilti-bowl Des		Make	Mo	del		M/D (nei)		Candas		CN	
Des	FMC	Make	MO	del		WP (psi)		Service		SN	
rface, Planned	?-N, 851ftKB	NATIONAL PROPERTY.									
ing Description	Wellbore Original Ho	la	Run Date 1/28/2016		Set Depth (I	MD) (ftKB)	Stick U-32.4	Jp (ftKB)	Set Tension (k	rips)	
tralizers	Oliginal Flo	ile	1/20/2010		Scratchers		-32.2		-	7 1 2 1	
	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (M (ftKB)	
1 Wellhead	<b>有限的企业</b> 的	13 3/8	12.625	54.50		TANK .		2.90	32		
Pup Joint		13 3/8	12.625	54.50				5.53	35		
Casing Joint		13 3/8	12.625	54.50				769.13	41	1	
1 Float Collar 1 Casing Joint		13 3/8	12.625 12.625	54.50 54.50				1.39	810 811	8	
1 Float Shoe		13 3/8	12.625	54.50				0.68	850	8	
the Associated State of the	ing 1, Planned?-N,	NAME OF TAXABLE PARTY.	12.020	04.00	0-00	- C - C - C - C - C - C - C - C - C - C		0.00	000		
ing Description	Wellbore		Run Date		Set Depth (I	MD) (ftKB)		Jp (ftKB)	Set Tension (k	kips)	
ermediate Casin	ng 1 Original Ho	le	4/1/2016		4,721 Scratchers		-32.6				
illalizers					Scialciers						
s	Item Des	00.00	15 (1-)			Top Conn Sz			Top Depth (MD)	Btm Depth (MI	
3				\\/\tau\/\ta		(in)	Ton Throad	Lon (ft)	(AVD)		
1 Hanger	item Des	OD (in) 9 5/8	ID (in) 8.835	Wt (lb/ft) 40.00	Grade HCK-55	(in)	Top Thread	Len (ft) 1.95	(ftKB)	(ftKB)	
	item des			40.00		(in)				(ftKB)	
1 Hanger 1 Pup Jt	nem Des	9 5/8	8.835	40.00 40.00	HCK-55	(in)	LT&C	1.95	33	(ftKB)	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar	nem des	9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49	33 35 38 4,636	(fiKB) 4,6	
<ol> <li>Hanger</li> <li>Pup Jt</li> <li>Casing Joint</li> <li>Float Collar</li> <li>Casing Joint</li> </ol>	item bes	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07	33 35 38 4,636 4,637	(fiKB) 4,6 4,6 4,7	
<ul><li>1 Hanger</li><li>1 Pup Jt</li><li>0 Casing Joint</li><li>1 Float Collar</li><li>2 Casing Joint</li><li>1 Float Shoe</li></ul>		9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55	(in)	LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49	33 35 38 4,636	(fiKB) 4,6 4,6 4,7	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casin	ng, Planned?-N, 14,	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55		LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	33 35 38 4,636 4,637 4,719	4,6 4,7 4,7	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe coduction Casing pescription coduction Casing	ng, Planned?-N, 14,	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB	8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55		LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	33 35 38 4,636 4,637	4,6 4,7 4,7	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing Description oduction Casing	ng, Planned?-N, 14,	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB	8.835 8.835 8.835 8.835 8.835 8.835	40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C Stick L -32.7	1.95 3.26 4,598.03 1.49 82.07 1.63	33 35 38 4,636 4,637 4,719	(ftKB)  4,6  4,7  4,7	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing Description oduction Casing Output 1 The state of the st	ng, Planned?-N, 14,7 Wellbore Original Ho	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 OD (in)	8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55		LT&C LT&C LT&C LT&C LT&C LT&C Stick L -32.7	1.95 3.26 4,598.03 1.49 82.07 1.63	33 35 38 4,636 4,637 4,719 Set Tension (k	(ftKB)  4,6  4,7  4,7	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing Description oduction Casing Otralizers 5 s 1 Casing Hange	ng, Planned?-N, 14,7 Wellbore Original Ho	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63	33 35 38 4,636 4,637 4,719 Set Tension (k	(ftKB)  4,6  4,6  4,7  4,7	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing bescription oduction Casing oducti	ng, Planned?-N, 14, Wellbore Original Ho	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 00 (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.875 8.875 8.875 8.875 8.875 8.875 8.778	40.00 40.00 40.00 40.00 40.00 40.00 Wt (ib/ft) 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Jp (ftKB) 7	33 35 38 4,636 4,637 4,719 Set Tension (k	(ftKB)  4,6  4,7  4,7  dips)  Btm Depth (M (ftKB)	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing intralizers 5 1 Casing Hang 1 Casing Pup 10 Casing Joint	ng, Planned?-N, 14,; Wellbore Original Ho	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00 Wt (ib/ft) 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Jp (ftKB) 7	33 35 38 4,636 4,637 4,719 Set Tension (k	(ftKB)  4,6  4,7  4,7  dips)  Btm Depth (M (ftKB)	
1 Hanger 1 Pup Jt 0 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe oduction Casing oduction Casing oduction Casing official Casing Hang 1 Casing Hang 1 Casing Pup Joint	ng, Planned?-N, 14,i Wellbore Original Ho Item Des Jer Joint	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 00 (in) 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Jp (ftKB) 7	33 35 38 4,636 4,637 4,719 Set Tension (k	(ftKB)  4,6  4,7  4,7  dips)  Btm Depth (M (ftKB)	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe coduction Casing pescription oduction Casing intralizers 1 Casing Hang 1 Casing Pup 10 Casing Joint 1 Casing Pup 13 Casing Joint 1 Casing Joint	ng, Planned?-N, 14,7 Wellbore Original Ho  Item Des ger Joint	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB OD (in) 5 1/2 5 1/2 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016	40.00 40.00 40.00 40.00 40.00 40.00 40.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63 Jp (ftKB) 7	33 35 38 4,636 4,637 4,719 Set Tension (k Top Depth (MD) (ftKB) 33 33 38 8,712	(ftKB)  4,6  4,7  4,7  dips)  Btm Depth (M (ftKB)  8,7	
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1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe 1 Float Shoe 1 Casing Hang 1 Casing Hang 1 Casing Pup	ng, Planned?-N, 14,7  Wellbore Original Ho  Item Des ger Joint Joint Joint Joint Joint	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB  OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (ib/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (ftKB) 7  Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17	33 35 38 4,636 4,637 4,719 Set Tension (k Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113 14,115	(ftKB)  4,6 4,7 4,7 4,7 4,7 4,7 4,7 4,7 4,7 4,7 4,7	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe 1 Float Shoe 1 Float Shoe 1 Casing Bescription 1 Casing Hang 1 Casing Pup 10 Casing Pup 11 Casing Pup 12 Casing Pup 13 Casing Pup 14 Casing Pup 15 Casing Pup 16 Casing Pup 17 Casing Pup 18 Casing Pup 18 Casing Pup 19 Casing Pup 10 Casing Pup 11 Casing Pup 11 Casing Pup 11 Casing Pup 12 Casing Pup 13 Casing Pup 14 Casing Pup 15 Casing Pup 16 Casing Pup 17 Casing Pup 18 Casing Pup 19 Casing Pup 19 Casing Pup 10 Casing Pup 10 Casing Pup 11 Casing Pup 11 Casing Pup 12 Casing Joint 13 Casing Joint 14 Casing Joint 15 Casing Joint 16 Casing Joint 17 Casing Joint 17 Casing Joint 18 Casing Joint	ng, Planned?-N, 14,7  Wellbore Original Ho  Item Des ger Joint Joint Joint Joint Joint	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB  OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	Wt (ib/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (114,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (ftKB) 7  Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48	33 35 38 4,636 4,637 4,719 Set Tension (k Top Depth (MD) (ftiKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,113	(ftKB)  4,6 4,6 4,7 4,7 4,7 dips)  Btm Depth (M (ftKB)  8,7 12,1 14,6 14,6 14,6 14,7 14,7 14,7 14,7 14,7	
1 Hanger 1 Pup Jt 10 Casing Joint 1 Float Collar 2 Casing Joint 1 Float Shoe roduction Casing asing Description roduction Casing entralizers 05  1 Casing Hang 1 Casing Pup 109 Casing Joint 1 Casing Pup 1 Casing Coll 1 Casing Joint 1 Float Collar	ng, Planned?-N, 14,7 Wellbore Original Ho Item Des Joint Joint Joint Joint Joint	9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 9 5/8 204ftKB  OD (in) 5 1/2	8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 8.835 Run Date 4/10/2016 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778 4.778	WI (Ib/ft) 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 HCK-55 Set Depth (I 14,204 Scratchers Grade P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110 P-110	MD) (ftKB)	LT&C LT&C LT&C LT&C LT&C LT&C LT&C LT&C	1.95 3.26 4,598.03 1.49 82.07 1.63  Up (ftKB) 7  Len (ft) 0.70 4.27 8,674.38 10.92 3,409.23 1,900.48 10.36 6.67 10.20 42.96 10.19 1.48 39.17 2.45	33 35 38 4,636 4,637 4,719 Set Tension (k Top Depth (MD) (ftKB) 33 38 8,712 8,723 12,132 14,033 14,043 14,050 14,060 14,103 14,115 14,115	(ftKB)  4,6 4,6 4,7 4,7 4,7	



**Production Casing Cement** 

					Production	Casing Cement
Well Name SALADO DRAW EA 18 FED P6	Lease Salado Draw EA 18 Fe		Id Name ILDCAT (HOBBS)		iness Unit d-Continent	
Ground Elevation (ft) Original RKB (ft 3,205.00 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015			Mud	Line Elevation (ft)	Water Depth (ft)
Production Casing Cement, Ca	asing, 4/11/2016 08:00					
Cementing Start Date 4/11/2016	Cementing E 4/11/2016			Wellbore Original Hole		
Evaluation Method Lift Pressure	Cement Evaluation Results Lost returns 220 bbl into	o displacement. Estin	mated TOC 2.570'			
Comment Pump production cement job as		o diopiacomoni. Loui	100 100 2,010			
Pressure test 500 psi low 6500 psi Bleed off Drop bottom plug Pump 30 bbl 10 ppg Mudpush s Pump 310 bbl 11.5 ppg lead 1 a 20 bbl of lead 1 50 bbl of lead 1 w/ Cem 50 bbl of lead 1 w/ Cem 140 bbl of lead 1 Pump 266.6 bbl 12.5 ppg lead 2 Pump 46.6 bbl 12.5 ppg tail at 4 b Drop top plug Pump 311 bbl fresh water displa 20 bbl with acid at 4 bpi 291 bbl fresh water at 3 Final circulating pressure 1550 ps Bump plug pressure 2277 psi Hold 500 psi over FCP for 5 min Bled back 2.5 bbl - floats held Lost returns at 220 bbl into disple	spacer at 5 bpm anNET anNET at 6 bpm apm accement m 8 bpm asi at 3 bpm					
Estimated TOC 2570 ft Cement in place at 11:30						
1, 2,570.0-14,214.0ftKB	W. Mariana					
Top Depth (ftKB) 2,570.0	Bottom Depth (ftKB) 14,214.0	Full Return? Vol 0.0	Cement Ret (bbl) Top Plug?		Bottom Plug?	
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min) 5.5	Final Pump F 1,550.0	Pressure (psi)	Plug Bump Pre 2,270.0	essure (psi)
Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		?	Pipe RPM (rpn	1)
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To	(ftKB) Drill Out Dian	neter (in)	Drill Out Date	
Spacer						
Fluid Type	Fluid Description	Quantity (sacks)	Class		Volume Pumpe	ed (bbl)
Spacer Estimated Top (ftKB)	MUDPUSH Express Spacer Estimated Bottom Depth (ftKB)	Percent Excess Pumped (	(%) Yield (ft³/sack	x)	30.0 Fluid Mix Ratio	(gal/sack)
1,923.0 Free Water (%)	2,570.0 Density (lb/gal)	Zero Gel Time (min)	Thickening Ti	ime (hr)	1st Compressi	ve Strength (psi)
Company Florid Addishara	10.00		E STATE OF THE STA			
Cement Fluid Additives  Add		Туре			Conc	
The second of the second of						
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) 647	Class H		Volume Pumpe 310.0	ed (bbl)
Estimated Top (ftKB) 2,570.0	Estimated Bottom Depth (ftKB) 8,759.0	Percent Excess Pumped (	(%) Yield (ft³/sack 2.69	x)	Fluid Mix Ratio	(gal/sack)
Free Water (%)	Density (lb/gal) 11.50	Zero Gel Time (min)	Thickening T	ime (hr)		ve Strength (psi)
Cement Fluid Additives	11:50	2 10 10 28 10 10 10 10 10	A CONTRACTOR OF THE CONTRACTOR	Carlotte Carlotte		
Add		Туре			Conc	
Lead				ALC: YEAR		
Fluid Type Lead	Fluid Description TXI + 4% D020 + .2% D046 + .2% D065 + .5% D112 + .4% D013 + .08% D208	Quantity (sacks)	Class H		Volume Pumpi 266.6	
Estimated Top (ftKB) 8,759.0	Estimated Bottom Depth (ftKB) 13,204.0	Percent Excess Pumped ( 35.0	(%) Yield (ft³/sack 1.62	()	Fluid Mix Ratio 8.70	(gal/sack)
Free Water (%)	Density (lb/gal) 12.50	Zero Gel Time (min)	Thickening T	ime (hr)	1st Compressi	ve Strength (psi)



### **Production Casing Cement**

SALADO DRAW I	EA 18 FED P6 005H	Salado Draw EA 18 F	Fed P6 WILDCAT	(HOBBS)	Mid-Continent
Ground Elevation (ft) 3,205.00	Original RKB (ft) 3,237.60	Current RKB Elevation 3,237.60, 12/15/2015	直接指導的影響電影		Mud Line Elevation (ft) Water Depth (ft)
Cement Fluid Ad	Iditives				
	Add		Туре		Conc
T-II					
Tail		And the second of the second			
Fluid Type Tail	Class H + 2% D0 D065 + .4% D167 + 75% D151 + .1		Quantity (sacks) 120	Class H	Volume Pumped (bbl) 46.6
Estimated Top (ftKB) 13,204.0	Estimated Bottom Depth (ftKB) 14,214.0		Percent Excess Pumped (%) 0.0	Yield (ft³/sack) 2.18	Fluid Mix Ratio (gal/sack) 9.55
Free Water (%)	Density 15.00		Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
Cement Fluid Ad	Iditives				
	Add		Туре		Conc
Displacement					
Fluid Type Displacement		escription Is Acetic Acid 291 bbls	Quantity (sacks)	Class	Volume Pumped (bbl) 311.0
Estimated Top (ftKB)	Estimat	ed Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density 8.33	(lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)
Cement Fluid Ad	Iditives				
BENEFIT TO THE	Add		Туре		Conc
	7100		1)100		

SEP 1 SURBRY	UNITED STATES PARTMENT OF THE IN UREAU OF LAND MANAC NOTICES AND REPOR IS form for proposals to a Use form 3160-3 (APD	TERIOR GEMENT RTS ON WI	ELLS -enter an proposals.		FORM OMB N Expires:  5. Lease Serial No. NMNM27506  6. If Indian, Allottee of	IO. 1004 July 31	4-0135 1, 2010
SUBMIT IN TRI	PLICATE - Other instruct	tions on rev	erse side.		7. If Unit or CA/Agre	ement,	Name and/or No.
Type of Well	Contact: [	DENISE PIN	KERTON		8. Well Name and No. SD EA 18 FED Po  9. API Well No.		ı
CHEVRON U.S.A. INC.  3a. Address	E-Mail: leakejd@ch		. (include area cod	30-025-42795	Evalor	otom	
6301 DEAUVILLE BLVD MIDLAND, TX 79706		Ph: 432-68		10. Field and Pool, or BONE SPRING		atory	
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)				11. County or Parish,	and Sta	te
Sec 19 T26S R33E Mer NMP	266FNL 1778FEL				LEA COUNTY,	NM	
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, RI	EPORT, OR OTHE	R DA	TA
TYPE OF SUBMISSION			TYPE (	OF ACTION			
T Nation Claim	☐ Acidize	pen	☐ Product	ion (Start/Resume)	ים	Water Shut-Off	
☐ Notice of Intent	☐ Alter Casing	☐ Frac	ture Treat	□ Reclam	ation	0 '	Well Integrity
Subsequent Report     ■     Subsequent Report	☐ Casing Repair	□ Nev	Construction	☐ Recomp	olete		Other
☐ Final Abandonment Notice	☐ Change Plans	Plug	and Abandon	□ Tempor	arily Abandon	Pro	duction Start-up
	☐ Convert to Injection	☐ Plug	Back	☐ Water I	Disposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi	ally or recomplete horizontally, g k will be performed or provide to operations. If the operation resident condonment Notices shall be file	give subsurface the Bond No. or ults in a multiple	locations and mean file with BLM/B e completion or re	sured and true ve IA. Required sul completion in a	ertical depths of all pertir bsequent reports shall be new interval, a Form 316	nent ma filed w 50-4 sha	rkers and zones. rithin 30 days ill be filed once
COMPLETION REPORT FOR 04/21/2016: MIRU.TIH W/CB 04/24/2016: PRESS TO 750F SIP - 2700 PSI. 05/02/2016: TEST LUBRICA	L FROM 9420-SURFACE. PSI LOW, 9800PSI HIGH.	ESTAB INJE	ECTION RATE.	TOTAL BBL	S PUMPED 87 BBL	_S.	
05/02/2016 THROUGH 05/16/ FRAC W/TOTAL SAND (SAN *****DETAILED PERF & FRAC	D 100 MESH & SAND 40/	70) = 6,008,	031 LBS				
05/22/2016: TIH W/PACKER 05/31/2016: TIH W/2 7/8" TB	& SET @ 8746'. G SET @ 8776'. *****TBG	SUMMARY	ATTACHED**	***			
14. I hereby certify that the foregoing is	Electronic Submission #3	50278 verifie RON U.S.A. I	d by the BLM W	/ell Information	ı System		
Name (Printed/Typed) DENISE F	PINKERTON		Title PERM	IITTING SPE	CIALIST		
Signature (Electronic S	(uhmission)		Data 00/07	12016			
Signature (Electronic S	THIS SPACE FO	R FEDERA	L OR STATE		SE		
Approved By			Title				Date
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conductive the applicant to conduct the applicant the applicant to conduct the applicant the applicant the applicant to conduct the applicant the applican	iitable title to those rights in the		Office				
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent					ake to any department or	agency	of the United

#### Additional data for EC transaction #350278 that would not fit on the form

#### 32. Additional remarks, continued

TBG PRESS UP TO 1600 PSI. CSG PRESS UP TO 500 PSI.

06/01/2016: RIG DOWN. RELEASE RIG.

07/25/2016: ON 24 HR OPT. FLOWING 684 OIL, 1461 GAS, 390 WATER. GOR - 2136. TBG - 807 PSI ON 32/64" CHOKE.

#### SD EA 18 FED P6 @005H

#### **PERF & FRAC INFORMATION**

STAGE 1: 14015, 13953, 13893, 13833, 13773

6 spf, .41 dia hole.

**PUMP STAGE 1:** 

Sand in formation 419,808 lbs 100%

Prime up & test lines to 9500psi. Avg Rate 83.3 bpm. Avg press:5336 psi.

Equalize/open well @ 1219 psi.

Max Press:8603 psi. ISIP:1957 psi

Max Rate: 85.5 bpm Pump Time 124 mins

Total clean fluid 9157 bbls Total slurry volume 9609 bbls

Sand pumped: Sand 100 – 328240 lbs

Sand 40/70 – 387,208 lbs TOTAL:420,032 lbs

STAGE 2: 13743, 13717, 13651, 13593, 12533, 13473

6 jspf, .41 dia hole. Total bbls pmpd: 330 bbls, max pressure 2323 psi

**PUMP STAGE 2:** 

Sand in formation 419,808 lbs: 100%

Test lines to 9500 psi.

Equalize/open well @ 1661 psi.

Avg Rate: 89.2 bpm

Avg Pressure 5044 psi

Max rate: 91.1 bpm

Max Pressure 7443 psi ISIP 2267 psi

Pump Time: 60 mins.

Total clean fluid:9109 bbls Total Slurry volume:9560 bbls

Sand pumped: Sand 100 - 30,956 lbs, Sand 40/70: 388,040 lbs TOTAL: 418,996 lbs

STAGE 3: 13443, 13413, 13353, 13270, 13210, 13173

6 jspf, .41 dia hole. Total bbls pmpd: 300 bbls. Max pressure: 2356 psi

**PUMP STAGE 3** 

Sand in formation 419,808 lbs, 100%

Prime up & test lines to 9500psi.

Equalize/open well @ 1157 psi.

Ave Rate: 90.4 bpm Ave Pressure: 6212 psi

Max Rate:90.7 bpm,

Max Pressure: 7506 psi.

ISIP: 2273 psi.

Pump Time: 113 mins. Total clean fluid: 8861 bbls. Total slurry volume:9314 bbls Sand Pumped: Sand 100 -33,097 lbs, Sand 40/70:387,875 lbs. TOTAL: 420,972 lbs

STAGE 4: 13103, 13063, 12993, 12933, 12873

6 JSPF, .41 dia hole. Line tension before set 1300 psi & 1040 after. Max press of 2327 psi w/244 bbls pumped.

**PUMP STAGE 4:** 

Sand in formation 419,808 lbs, 100% Prime up & test lines to 9500 psi.

Equalize/open well @ 1716 psi. Avg Rate: 89.7 bpm, Avg Pressure: 6039 psi.

Max Rate: 90.4 bpm, Max Pressure: 8661 psi. ISIP:2254 psi.

Pump Time: 122 mins. Total clean fluid: 9118 bbls, Total slurry volume: 9570 bbls Sand pumped: Sand 100: 32,227 lbs, Sand 40/70L 387,525 lbs, TOTAL: 419,752 lbs

STAGE 5: 12831, 12797, 12732, 12695, 12634, 12574

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. . Max pressure of 2456 psi w/227 bbls pumped.

**PUMP STAGE 5:** 

Sand in formation: 419,808 lbs, 100%, Prime up & test lines to 9500psi.

Equalize/open well @1907 psi. Ave Rate: 89.3 bpm, Avg pressure:6096 psi

Max Rate:90.3 bpm, Max Pressure: 8628 psi. ISIP: 2488 psi.

Pump Time: 120 mins. Total clean fluid:8734 bbls, Total Slurry volume:9187 bbls

Sand pumped: Sand 100:33,159 lbs, Sand 40/70:388,234 lbs, TOTAL: 421,393 lbs

#### STAGE 6: 12539, 12513, 12453, 12393, 12333, 12273

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Pressure of 2733 psi w/255 bbls pumped.

#### **PUMP STAGE 6:**

Sand in formation: 419,808 lbs, 100%. Prime up & test lines to 9500 psi.

Equalize/open well @ 1779 psi. Ave Rate:85.5 bpm, Ave Pressure: 5702 psi.

Max rate:86.8 bpm, Max Pressure:8634 psi. ISIP:2581 psi.

Pump time:118 mins. Total clean fluid: 8956 bbls, Total Slurry volume:9409 bbls Sand pumped: sand 100:33,784 lbs, sand 40/70:386,525 lbs. TOTAL:420,309 lbs

#### STAGE 7: 12233, 12213, 12153, 12093, 12033. 11973

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. . Max pressure of 2603 psi w/226 bbls pumped. **PUMP STAGE 7:** 

Sand in formation: 419,808 lbs,101 %, Prime up & test lines to 9500 psi.

Equalize/open hole @1835 psi. Ave rate:90.0 bpm, Ave Pressure:6044 psi

Max rate: 90.0 bpm, Max Pressure: 8676 psi. ISIP: 2521 psi.

Pump time:118 mins. Total clean fluid:8891 bbls, Total slurry volume:9346 bbls. Sand Pumped: Sand 100:32,508 lbs, Sand 40/70: 389,592 lbs, TOTAL:422,100 lbs

#### STAGE 8: 11943, 11913, 11853, 11773, 11723, 11673

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max pressure of 2370 psi w/171 bbls pumped. **PUMP STAGE 8:** 

Sand in formation: 419,808 lbs, 100%, Prime up & test lines to 9500 psi.

Equalize/open hole @ 1886 psi. Ave Rate: 85.5 bpm, Ave pressure: 5914 psi

Max Rate: 87.4 bpm, Max pressure: 8545 psi. ISIP: 2496 psi.

Pump time: 118 mins. Total clean fluid: 8798 bbls, Total slurry volume: 9252 bbls Sand pumped: Sand 100: 33,410 lbs, Sand 40/70: 387,713 lbs. TOTAL 421,123 lbs

#### STAGE 9: 11633, 11613, 11550, 11493, 11438, 11373

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max pressure of 2577 psi w/187 bbls pumped. **PUMP STAGE 9:** 

Sand in Formation: 419,808 lbs, 100% Prime up & test lines to 9500 psi.

Equalize/open well @ 1791 psi. Ave Rate: 85.4 bpm, Ave Pressure: 5914 psi.

Max rate: 86.1 bpm, Max pressure: 8262 psi. ISIP: 2469 psi.

Pump time: 118 mins. Total Clean fluid: 8832 bbls, Total slurry volume: 9285 bbls Sand pumped: Sand 100: 33,266 lbs, Sand 40/70: 387,565 lbs. TOTAL: 420,831 lbs

#### STAGE 10: 11300, 11260, 11220, 11180, 11040

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max press of 5893 psi w/196 bbls pumped. **PUMP STAGE 10:** 

Sand in formation: 299,975 lbs, 100% Prime up and test lines to 9500 psi.

Equalize/open well @ 1903 psi. Ave Rate: 90.0 bpm, Ave Pressure: 5470 psi.

Max Rate: 90.0 bpm, Max pressure: 7332 psi. ISIP: 2603 psi.

Pump time: 118 mins. Total clean fluid: 6669 bbls, Total slurry volume: 6993bbls Sand pumped: Sand 100: 20,091 lbs, Sand 40/70: 280,457 lbs. TOTAL 300,548 lbs

STAGE 11: 11110, 11070, 11030, 10990, 10950, 10910

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Press 4319 psi w/152 bbls pumped.

#### **PUMP STAGE 11:**

Sand in formation: 299,975 lbs, 64%, Prime up and test lines to 9500 psi. Equalize/open well @ 1777 psi. Ave Rate: 83.1 bpm. Ave Pressure: 6228 psi.

Max rate: 86.2 bpm, Max pressure: 8746 psi. ISIP: 3468 psi.

Pump time: 157 mins. Total clean fluid: 6362 bbls, total slurry volume 6568 bbls. Sand pumped: Sand 100: 20,963 lbs, Sand 40/70: 170,620 lbs, TOTAL: 191,583 lbs

#### STAGE 12: 10870, 10830, 10780, 10725, 10680, 10630

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max Pressure of 4948 psi w/151 bbls pmped.

#### **PUMP STAGE 12:**

Sand in formation: 369,967 lbs, 100% Prime up and test lines to 9500 psi. Equalize/open well @ 1871 psi. Ave Rate: 85.0 bpm, Ave pressure: 5579 psi

Max rate: 86.0 bpm, Max pressure: 7878 psi, ISIP: 2792 psi.

Pump time: 126 mins, Total clean fluid: 7969 bbls, Total slurry volume: 8367 bbls. Sand pumped: Sand 100: 23,560 lbs, Sand 40/70: 346,632 lbs, TOTAL: 370,192 lbs.

#### STAGE 13: 10595, 10535, 10465, 10395, 10328, 10265

6 JSPF, .41 dia holle. Pump dn @ 12 bpm. Max pressure of 2618 psi w/113 bbls pumped. **PUMP STAGE 13:** 

Sand in formation: 470,063 lbs, 100%, Prime up & test lines to 9500 psi.

Equalize/open well @ 1886 psi. Ave Rate: 90.0 bpm, Ave Pressure: 5570 psi.

Max Rate: 90.5 bpm, Max Pressure: 8179 psi. ISIP: 2780 psi.

Pump time: 120 mins. Total clean fluid: 9852 bbls, Total slurry volume: 10,358 bbls. Sand pumped: Sand 100: 32,433 lbs, Sand 40/70: 438,114 lbs TOTAL: 470,547 lbs

#### STAGE 14: 10234, 10174, 10115, 10055, 9990, 9934

6 JSPF, .41 dia hole. Pump down @ 15 bpm. Max press of 2600 psi w/96 bbls pumped. **PUMP STAGE 14:** 

Sand in formation: 470,063 lbs 100%. Prime up & test lines to 9500 psi.

Equalize/open hole W 1843 psi. Ave rate: 84.8 bpm, Ave Press: 5489 psi

Max Rate: 85.4 bpm, Max pressure: 7857 psi. ISIP: 2566 psi. Pump time: 148 mins. Total clean fluid: 9895 bbls, Total slurry volume: 10,401 bbls. Sand pumped: Sand 100: 32,569 lbs, Sand 40/70: 437,437 lbs, TOTAL 470,006 lbs.

#### STAGE 15: 9904, 9874, 9815, 9750, 9685, 9619

6 JSPF, .41 dia hole. Pump dn @ 12 bpm. Max press 2426 psi @ 50 bbls pumped.

#### **PUMP STAGE 15:**

Sand in formation: 419850 lbs, 100%. Prime up & test lines to 9500 psi.

Equalize/open well @ 2013 psi. Ave Rate: 86.0 bpm, Ave Pressure: 5288 psi.

Max Rate: 86.6bpm, Max pressure: 8456 psi, ISIP:2474 psi.

Pump time 134 mins, Total clean fluid: 8846 bbls, Total slurry volume: 9298 bbls Sand pumped: Sand 100: 33,970 lbs, Sand 40/70: 385,677 lbs, TOTAL 419,647 lbs



### **Tubing Summary**

Well Name SALADO DRAW EA 18 FED P6 005H	Lease Salado Draw EA 18 Fed P6		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)		

			Land - Original Hole, 5/31/2016 4:00:00 PM	Tubi	ng Strings								
MD TVD Incl Vertical schematic (actual)				Tubing	Description	Pla N	Planned Run?			Set Depth (MD) (ftKB)		Set Depth (TVD) (ftKB)	
3)	B)	(°)	volucai scriettiatic (actual)	The second second	Tubing Run Date		SECURIOR DESCRIPTION OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PE		8,775.6 Pull Date		8,755.1 Pull Job		
.	2.9	0.0	1-1; TUBING; 2 7/8; 2.441; 32 \$\int 31.12	5/31/	2016			4/20/20	16				
	6.4	0.0	1-2; TUBING SUB; 2 7/8;	Jts	Item Des	OD (in)	:00 ID (in)	Wt (lb/ft)	Gra	ade Top Thread	Len (ft)	Top (ftKB)	Btm (ftKE
			2.441; 63; 6.13 1-3; TUBING; 2 7/8; 2.441; 69	1	TUBING	2 7/8		6.50	L-80	8RD	31.12		63
134	13.4	0.0	1,963.03 1-4; GAS LIFT VALVE #13; 4.34; 2.441; 2,032; 4.10	1	TUBING SUB	2 7/8	2.441	6.50	L-80	8RD	6.13	63.1	69
16.9	18.9	0.0	1-5; TUBING; 2 7/8; 2.441; 2,036; 840.97 1-6; GAS LIFT VALVE #12;	63	TUBING	2 7/8	2.441	6.50	L-80	8RD	1,963.0		2,032
23.8	20.4	0.1	4.34; 2.441; 2,877; 4.10 1-7; TUBING; 2 7/8; 2.441;	1	GAS LIFT VALVE #13	4.335	2.441			8RD	4.10		2,036
7.4	27.4	0.1	2,881; 532.44 1-8; GAS LIFT VALVE #11;	27	TUBING	2 7/8	2.441	6.50	L-80	8RD	840.97	2.036.4	2.877
.,	30.9	0,1	4.34; 2.441; 3,414; 4.10 1-9; TUBING; 2 7/8; 2.441; 3,418; 530.34	1	GAS LIFT VALVE #12	Section 1 and 1 decision in	2.441	0.00	2-00	8RD	4.10		2,881
"	34.4	0.1	1-10; GAS LIFT VALVE #10; 4.34; 2.441; 3,948; 4.10	17	Marine Street	2 7/8	2.441	6.50	L-80	8RD	532.44	2,881.5	3,413
06.4	2,032.9	2.3	1-11; TUBING; 2 7/8; 2.441; 3,952; 560.91	1	GAS LIFT VALVE #11	THE RESERVE OF THE PERSON NAMED IN	2.441	0.50	200	8RD	4.10		3,418
			1-12; GAS LIFT VALVE #9; 4.34; 2.441; 4,513; 4.10	17		2 7/8	2.441	6.50	L-80	8RD	530.34	2 410 0	3,948
19.5	4,708.3	4.8	1-13; TUBING; 2 7/8; 2.441; 4,517; 531.24 1-14; GAS LIFT VALVE #8;	1	GAS LIFT	And in column 2 is not a local division in column 2 is not a local	2.441	6.50	L-80	8RD	4.10		3,948
7.8	5,604.1	4.3	4.34; 2.441; 5,049; 4.10		VALVE #10								
6.7	7.228.3	3.8	1-15; TUBING; 2 7/8; 2.441; 5,053; 560.77	18		2 7/8		6.50	L-80	8RD	560.91	3,952.4	4,513
	8,896.5	4.0	1-16; GAS LIFT VALVE #7; 4.34; 2.441; 5,614; 4.10 1-17; TUBING; 2 7/8; 2.441;	1	GAS LIFT VALVE #9	4.335				8RD	4.10	4,513.3	4,517
	8,747.5	5.8	5,618; 527.48 1-18; GAS LIFT VALVE #6;	17	TUBING	2 7/8		6.50	L-80	8RD	531.24		5,048
1	9,256.2	91.0	101 0111 0115 110	1	GAS LIFT VALVE #8	4.335	2.441			8RD	4.10	5,048.7	5,052
1	9,251.6	92.9	6,149; 560.20 1-20; GAS LIFT VALVE #5;	18	TUBING	2 7/8	2.441	6.50	L-80	8RD	560.77	5,052.8	5,613
	9,240.9	93.8 95.0	4.34; 2.441; 6,145; 4.10 [1-19; TUBING; 2 7/8; 2.441; 6,149; 560.20 [1-20; GAS LIFT VALVE #5; 4.34; 2.441; 6,709; 4.10 [1-21; TUBING; 2 7/8; 2.441; 6,714; 528.27	1	GAS LIFT VALVE #7	4.335	2.441			8RD	4.10	5,613.6	5,617
			6,714; 528.27 1-22; GAS LIFT VALVE #4;	17	TUBING	2 7/8	2.441	6.50	L-80	8RD	527.48	5,617.7	6,14
	9,208.3	94.2	1-20, RSA LIFT VALVE #3; 4.34; 2.441; 6,709; 4.10 1-21; TUBING; 2.7/8; 2.441; 6,714; 528.27 1-22; GAS LIFT VALVE #4; 4.34; 2.441; 7,242; 4.10 1-23; TUBING; 2.7/8; 2.441; 7,246; 559.24 1-24; GAS LIFT VALVE #3; 4.34; 2.441; 7,805; 4.10 1-25; TUBING; 2.7/8; 2.441; 7,809; 529.85 1-26; GAS LIFT VALVE #2;	1	GAS LIFT VALVE #6	4.335	2.441			8RD	4.10	6,145.1	6,14
١	9,193.4	88.8	1-24; GAS LIFT VALVE #3; 4.34; 2.441; 7,805; 4.10	18	TUBING	27/8	2.441	6.50	L-80	8RD	560.20	6,149.2	6,70
	9,195.8	90.0	1-24; GAS LIFT VALVE #3; 4.34; 2.441; 7.805; 4.10 1-25; TUBING; 2.7/8; 2.441; 7,809; 529.65 1-26; GAS LIFT VALVE #2;	1	GAS LIFT VALVE #5	4.335	2.441			8RD	4.10	6,709.4	6,71
١	0,104.2	91.6	1-26; GAS LIFT VALVE #2; 4.34; 2.441; 8,339; 4.10	17	TUBING	2 7/8	2.441	6.50	L-80	8RD	528.27	6,713.5	7,24
	9,189.3 9,185.7	92.0	4.34; 2.441; 8,339; 4.10 1-27; TUBING; 2.79; 2.441; 8,343; 373.97 1-28; GAS LIFT VALVE #1; 4.34; 2.441; 8,747; 4.10	1	GAS LIFT VALVE #4	4.335	2.441			8RD	4.10	7,241.8	7,24
١	9,184.3	90.3	1-29: TURING: 2.7/8: 2.441	18	TUBING	2 7/8	2.441	6.50	L-80	8RD	559.24	7,245.9	7,80
	9,183.0	91.3	8,721; 31.08 1-30: ON-OFF TOOL 2.313 X	1	GAS LIFT VALVE #3	4.335	2.441	T.		8RD	4.10	7,805.1	7,80
-	9,160,4	90.8	PROFILE; 4 1/2; 2.313; 8,752; 1.83	17	TUBING	2 7/8	2.441	6.50	L-80	8RD	529.65	7,809.2	8,33
1	9,174.1	93.2	PROFILE; 4 1/2; 2.313; 8,752; 1.83 1-31; 450 W HORNET PACKER; 4 1/2; 2.370; 8,754; 7.80	1	GAS LIFT VALVE #2	4.335	2.441	770		8TRD	4.10	8,338.9	8,343
١	9,168.1	90.5	1-32; Tubing; 2 7/8; 2.441; 8,762; 6.30	12	TUBING	2.785	2.441	6.50	L-80	8RD	373.97	8,343.0	8,71
١	9,171.1 9,176.4	88.8	1-33; 2.313 BXN Nipple -W/2.205 NO-GO; 2 7/8; 2.205	1	GAS LIFT VALVE #1	The Person of the Person	2.441			8RD	4.10	The second secon	8,72
1	9,178.4	91.6	8,768; 1.16 1-34; Tubing; 2 7/8; 2.441;	1	TUBING	2 7/9	2.441	6.50	L-80	8RD	31.08	8,721.1	8.75
1	9.171.2	91.4	8,769; 4.10 1-35; MAGNUM DISK; 2 7/8;	1	ON-OFF	State of the latest state	2.313	0.00	2 00	8RD	1.83		8.75
	9,166.2	91.6	PROFILE, 4 1/2, 2.313; 8,752; 1.83 1.31; 450 W HORNET PACKER; 4 1/2, 2.370; 8,754; 7.80 1.32; Tubing; 2 7/8; 2.441; 8,762; 6.30 1.33; 2.313 BXN Nipple W/2.205 NO-GO, 2 7/8; 2.205 8,768; 1.16 1.34; Tubing; 2 7/8; 2.441; 8,769; 4.10 1.35; MAGNUM DISK, 2 7/8; 2.441; 8,773; 1.82 1.36; Wireline Guide; 2 7/8; 2.441; 8,775; 0.46		TOOL, 2.313 X								
1	9,162.6	90.9	Bor von		PROFILE								
1	9,160.7	90.8	1500 0000 1500 0000 1500 0000	1	450 W HORNET	4 1/2	2.370			8RD	7.80	8,754.0	8,76
1	9.156.7	90.3	BOY ONE		PACKER	0.70	2.44	0.40	1.00	000		0.701	0.70
	9,157.4	89.8	POR MODE BODO MODEL BODO MODEL		Tubing	2 7/8	2.441	6.40	L-80	8RD	6.30	8,761.8	8,768
8.1	9,155.5	90.4	68 68 68 F										

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Report Printed: 8/10/2016



# **Tubing Summary**

Well Name SALADO DRAW EA 18 FED P6 005H	Lease Salado Draw EA 18 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)		

			Land - Original Hole, 5/31/2016	4.00.00 FW
ID tK B)	TVD (ftK B)	Incl (°)	Vertical sche	ematic (actual)
			- JE-10	1-1; TUBING; 2 7/8; 2.441; 32;
•	2.9	0.0		31.12 1-2; TUBING SUB; 2 7/8;
4	8.4	0.0		2.441; 63; 6.13 1-3; TUBING; 2 7/8; 2.441; 69;
9	2.5	0.0	( C )	1,963.03 1-4; GAS LIFT VALVE #13;
1.4	13.4	0.0		4.34; 2.441; 2,032; 4.10 1-5; TUBING; 2 7/8; 2.441;
1.97	16.9	0.0	The same of the same	2,036; 840.97
lA .	20,4	0.1	700	1-6; GAS LIFT VALVE #12; 4.34; 2.441; 2,877; 4.10
1.9	23.9	0.1		1-7; TUBING; 2 7/8; 2.441; 2,881; 532.44
.4	27.4	0.1	the state of the s	1-8; GAS LIFT VALVE #11; 4.34; 2.441; 3,414; 4.10
19	30.0	0.1	anananananan mananananan	1-9; TUBING; 2 7/8; 2.441; 3,418; 530.34
4	34.4	0.1		1-10; GAS LIFT VALVE #10;
10.0	809.8	2.3		4.34; 2.441; 3,948; 4.10 1-11; TUBING; 2 7/8; 2.441;
38.4	2.032.9	6.7		3,952; 560.91 1-12; GAS LIFT VALVE #9;
48.0	3,939.5	4.8		4.34; 2.441; 4,513; 4.10 ~ 1-13; TUBING; 2.7/8; 2.441;
19.5	4,708.3	4.2		4,517; 531.24 1-14; GAS LIFT VALVE #8;
17.8	5.804.1	4.3		4.34; 2.441; 5,049; 4.10 1-15; TUBING; 2 7/8; 2.441;
46.1	7,228.3	3.8		5,053; 560.77
16.9	8.006.5	4.0	8 - SA	1-16; GAS LIFT VALVE #7; 4.34; 2.441; 5,614; 4.10
58.0	8,747.5	5.8		1-17; TUBING; 2 7/8; 2.441; 5,618; 527.48
28.1	9,258.2	91.0	A30	1-18; GAS LIFT VALVE #6; 4.34; 2.441; 6,145; 4.10
16.3	9,251.6	92.9	TON AND	1-19; TUBING; 2 7/8; 2.441; 6,149; 560.20
96.1	9.240.9	93.8	EASU ASSE ESSA ASSE ESSA ASSE	1-20; GAS LIFT VALVE #5; 4.34; 2.441; 6,709; 4.10
175.9	9,227 9	95.0	Store Add Add Add Add Add Add Add Add Add Ad	1-21; TUBING; 2 7/8; 2.441;
357.0	9 208 3		CON CONTRACTOR	6,714; 528.27 1-22; GAS LIFT VALVE #4;
		94.2	302	4.34; 2.441; 7,242; 4.10 1-23; TUBING ; 2 7/8; 2.441;
702.2	9,195.4	92.9	600 640 360 960	7,246; 559.24 1-24; GAS LIFT VALVE #3;
		88.8	ESPA NACE	4.34; 2.441; 7,805; 4.10 1-25; TUBING; 2 7/8; 2.441;
952.1	0,195.8	90.0	II (90 ME)	7,809; 529.65 1-26; GAS LIFT VALVE #2;
071.9	9.104.2	91.6	100 00 00 00 00 00 00 00 00 00 00 00 00	4.34; 2.441; 8,339; 4.10
222 1	9,169,5	92.0	#30v 1000 #40n 4000 #50v 400	1-27; TUBING; 2.79; 2.441; 8,343; 373.97
274.0	8,185.7	90.4	1800 (1901) 1800 (1901)	1-28; GAS LIFT VALVE #1; 4.34; 2.441; 8,717; 4.10
988.1	9,164.3	90.3	1942 MEI 1970 MEI 1970 MEI	1-29; TUBING; 2 7/8; 2.441; 8,721; 31.08
724.1	9.183.0	91.3	150° 00111 150° 0031	1-30; ON-OFF TOOL, 2.313 X PROFILE; 4 1/2; 2.313; 8,752;
915.8	9,180.4	90.8	200 ON	1.83 1-31; 450 W HORNET
295.1	9,174.1	93.2	199 (9)	PACKER; 4 1/2; 2.370; 8,754;
273.0	9,168.1	90.5	ESH 400 ESH 400 ESH 400	7.80 1-32; Tubing; 2 7/8; 2.441;
483.1	9,171.1	88.8	100 HTM 100 HTM 100 HTM	8,762; 6.30 1-33; 2.313 BXN Nipple
632.6	9,176.4	88.6	II SON MOST INVASION INVASIONI	W/2.205 NO-GO; 2 7/8; 2.205; 8,768; 1.16
194.5	9,176.4	91.6	No ord	1-34; Tubing; 2 7/8; 2.441; 8,769; 4.10
995.3	9.171.2	91.4	ESTA ANG	1-35; MAGNUM DISK; 2 7/8; 2.441; 8,773; 1.82
172.8	9,186.2	91.6	150 KG	1-36; Wireline Guide; 2 7/8;
263.0	9,162.6	90.9	Son son	2.441; 8,775; 0.46
533.1	9,160.7	90.8	Zich still	
214.9	9,156.7	90.3	1974 1975 1975	
854.8	9.157.4	89.8	500 000 500 000 500 000	
.015.1	9,155.5	90.4	(50x (50) (50x (50)	
			**	

Jts Item Des		OD (in)	ID (in)	Wt (lb/ft)	Grad	e Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)	
1	2.313 BXN 2 7/8 2.205 Nipple W/2.205 NO-GO 2 7/8 2.205			8RD	1.16	8,768.1	8,769.2			
1 Tubing		2 7/8	2.441	6.40	L-80	8RD	4.10	8,769.2	8,773.3	
1	MAGNUM DISK			<b>在</b> 上	1.82	8,773.3	8,775.2			
1	Wireline Guide	2 7/8	2.441			8RD	0.46	8,775.2	8,775.6	
Rod S	Strings									
Rod De	scription	Plan	Planned Run?			et Depth (ftKB)		Set Depth (TVD) (ftKB)		
Run Da	ite	Run	Run Job			ull Date	PV	Pull Job		
Rod (	Components	DOM:	1000							
Jts Item Des		Des	0	OD (in) Grade		Model	Len (f	t) Top (ftKB)	Btm (ftKB)	

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