



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016		Mud Line Elevation (ft)	Water Depth (ft)

Original Hole			
Wellbore Name Original Hole	Directional Type Horizontal	Min Kick Off Depth (ftKB) 8,540.0	Vertical Section Direction (") 183.10
Hole Size (in)	Act Top (ftKB)		Act Btm (ftKB)
17 1/2	33.0		832.0
12 1/4	832.0		4,578.0
8 3/4	4,578.0		14,043.0

<typ>, <make> on <dtmstart>					
Sub-Type			Install Date		
Des	Make	Model	WP (psi)	Service	SN

Conductor, Planned?-N, 113ftKB										
Casing Description Conductor		Wellbore Original Hole		Run Date 4/1/2016		Set Depth (MD) (ftKB) 113		Stick Up (ftKB) -32.6		Set Tension (kips)
Centralizers						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	20	18.375	169.00	K-55			80.00	33	113

Surface, Planned?-N, 822ftKB										
Casing Description Surface		Wellbore Original Hole		Run Date 4/18/2016		Set Depth (MD) (ftKB) 822		Stick Up (ftKB) -33.7		Set Tension (kips)
Centralizers 9						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	UH-2 Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.88	34	37
1	Casing Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.01	37	41
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	741.62	41	782
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.50	782	784
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	36.45	784	820
1	Casing Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.80	820	822

Intermediate Casing 1, Planned?-N, 4,568ftKB										
Casing Description Intermediate Casing 1		Wellbore Original Hole		Run Date 5/18/2016		Set Depth (MD) (ftKB) 4,568		Stick Up (ftKB) -35.7		Set Tension (kips)
Centralizers 28						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Hanger	9 5/8	8.844	40.00	HCK-55		LT&C	0.63	36	36
1	Casing Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.08	36	40
106	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,441.35	40	4,482
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.48	4,482	4,483
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	82.17	4,483	4,565
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	2.63	4,565	4,568

Production Casing, Planned?-N, 14,027ftKB										
Casing Description Production Casing		Wellbore Original Hole		Run Date 5/27/2016		Set Depth (MD) (ftKB) 14,027		Stick Up (ftKB) -33.5		Set Tension (kips)
Centralizers 71						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.19	33	35
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.28	35	39
204	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,483.08	39	8,522
1	Marker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.46	8,522	8,527
129	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,335.60	8,527	13,863
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,863	13,873
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.64	13,873	13,880



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H		Lease		Field Name JENNINGS		Business Unit Mid-Continent	
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016				Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.83	13,880	13,889
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.67	13,889	13,930
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,930	13,940
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.48	13,940	13,941
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.74	13,941	13,980
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.41	13,980	13,983
1	Vibrator	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.23	13,983	13,985
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	39.46	13,985	14,024
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.67	14,024	14,027

Surface Casing Cement, Casing, 4/18/2016 08:30

Cementing Start Date 4/18/2016		Cementing End Date 4/18/2016		Wellbore Original Hole	
Evaluation Method Returns to Surface		Cement Evaluation Results 97 bbls cmt to surface			
Comment					

1, 32.6-832.0ftKB

Top Depth (ftKB) 32.6	Bottom Depth (ftKB) 832.0	Full Return? Y	Vol Cement Ret (bbl) 97.0	Top Plug? Y	Bottom Plug? N
Initial Pump Rate (bbl/min) 5.6	Final Pump Rate (bbl/min) 2.2	Avg Pump Rate (bbl/min) 5.6	Final Pump Pressure (psi) 341.0	Plug Bump Pressure (psi) 870.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Spacer

Fluid Type Spacer	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl) 40.0	
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)	
Free Water (%)	Density (lb/gal) 8.33	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description	Quantity (sacks) 960	Class C	Volume Pumped (bbl) 227.0	
Estimated Top (ftKB) 32.6	Estimated Bottom Depth (ftKB) 832.0	Percent Excess Pumped (%) 125.0	Yield (ft³/sack) 1.33	Fluid Mix Ratio (gal/sack) 6.37	
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl) 120.0	
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)	
Free Water (%)	Density (lb/gal)	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Intermediate Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H	Lease	Field Name JENNINGS	Business Unit Mid-Continent
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016	Mud Line Elevation (ft) Water Depth (ft)

Original Hole			
Wellbore Name Original Hole	Directional Type Horizontal	Min Kick Off Depth (ftKB) 8,540.0	Vertical Section Direction (*) 183.10
Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
17 1/2	33.0	832.0	
12 1/4	832.0	4,578.0	
8 3/4	4,578.0	14,043.0	

<typ>, <make> on <dtmstart>					
Sub-Type			Install Date		
Des	Make	Model	WP (psi)	Service	SN

Conductor, Planned?-N, 113ftKB										
Casing Description Conductor		Wellbore Original Hole		Run Date 4/1/2016		Set Depth (MD) (ftKB) 113		Stick Up (ftKB) -32.6		Set Tension (kips)
Centralizers						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	20	18.375	169.00	K-55			80.00	33	113

Surface, Planned?-N, 822ftKB										
Casing Description Surface		Wellbore Original Hole		Run Date 4/18/2016		Set Depth (MD) (ftKB) 822		Stick Up (ftKB) -33.7		Set Tension (kips)
Centralizers 9						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	UH-2 Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.88	34	37
1	Casing Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.01	37	41
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	741.62	41	782
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.50	782	784
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	36.45	784	820
1	Casing Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.80	820	822

Intermediate Casing 1, Planned?-N, 4,568ftKB										
Casing Description Intermediate Casing 1		Wellbore Original Hole		Run Date 5/18/2016		Set Depth (MD) (ftKB) 4,568		Stick Up (ftKB) -35.7		Set Tension (kips)
Centralizers 28						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Hanger	9 5/8	8.844	40.00	HCK-55		LT&C	0.63	36	36
1	Casing Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.08	36	40
106	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,441.35	40	4,482
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.48	4,482	4,483
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	82.17	4,483	4,565
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	2.63	4,565	4,568

Production Casing, Planned?-N, 14,027ftKB										
Casing Description Production Casing		Wellbore Original Hole		Run Date 5/27/2016		Set Depth (MD) (ftKB) 14,027		Stick Up (ftKB) -33.5		Set Tension (kips)
Centralizers 71						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.19	33	35
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.28	35	39
204	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,483.08	39	8,522
1	Marker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.46	8,522	8,527
129	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,335.60	8,527	13,863
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,863	13,873
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.64	13,873	13,880



Cement Summary

Intermediate Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016		Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.83	13,880	13,889
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.67	13,889	13,930
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,930	13,940
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.48	13,940	13,941
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.74	13,941	13,980
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.41	13,980	13,983
1	Vibrator	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.23	13,983	13,985
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	39.46	13,985	14,024
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.67	14,024	14,027

Intermediate Casing Cement, Casing, 5/18/2016 22:30

Cementing Start Date 5/18/2016		Cementing End Date 5/19/2016	Wellbore Original Hole
Evaluation Method Returns to Surface		Cement Evaluation Results 215 bbl /497 sx CMT to surface	

Comment
Design lift pressure - 970 psi

1, 32.6-4,578.0ftKB

Top Depth (ftKB) 32.6	Bottom Depth (ftKB) 4,578.0	Full Return? Y	Vol Cement Ret (bbl) 215.0	Top Plug? Y	Bottom Plug? N
Initial Pump Rate (bbl/min) 6.5	Final Pump Rate (bbl/min) 3.3	Avg Pump Rate (bbl/min) 6.5	Final Pump Pressure (psi) 1,300.0	Plug Bump Pressure (psi) 1,810.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Spacer

Fluid Type Spacer	Fluid Description Dyed Spacer	Quantity (sacks)	Class	Volume Pumped (bbl) 35.0	
Estimated Top (ftKB) 32.6	Estimated Bottom Depth (ftKB) 32.6	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)	
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description 50:50 POZ/C	Quantity (sacks) 1,025	Class C	Volume Pumped (bbl) 443.0	
Estimated Top (ftKB) 32.6	Estimated Bottom Depth (ftKB) 2,718.0	Percent Excess Pumped (%) 150.0	Yield (ft³/sack) 2.43	Fluid Mix Ratio (gal/sack) 13.98	
Free Water (%)	Density (lb/gal) 11.90	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description C-Neat	Quantity (sacks) 450	Class C	Volume Pumped (bbl) 106.0	
Estimated Top (ftKB) 2,718.0	Estimated Bottom Depth (ftKB) 4,578.0	Percent Excess Pumped (%) 85.0	Yield (ft³/sack) 1.33	Fluid Mix Ratio (gal/sack) 6.35	
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc



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Intermediate Casing Cement

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Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016		Mud Line Elevation (ft)	Water Depth (ft)

Displacement				
Fluid Type Displacement	Fluid Description Displacement	Quantity (sacks)	Class	Volume Pumped (bbl) 340.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives		
Add	Type	Conc



Cement Summary

Production Casing Cement

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Wellbore Name Original Hole	Directional Type Horizontal	Min Kick Off Depth (ftKB) 8,540.0	Vertical Section Direction (*) 183.10
Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
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12 1/4	832.0	4,578.0	
8 3/4	4,578.0	14,043.0	

<typ>, <make> on <dtmstart>					
Sub-Type			Install Date		
Des	Make	Model	WP (psi)	Service	SN

Conductor, Planned?-N, 113ftKB										
Casing Description Conductor		Wellbore Original Hole		Run Date 4/1/2016		Set Depth (MD) (ftKB) 113		Stick Up (ftKB) -32.6		Set Tension (kips)
Centralizers						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Joint	20	18.375	169.00	K-55			80.00	33	113

Surface, Planned?-N, 822ftKB										
Casing Description Surface		Wellbore Original Hole		Run Date 4/18/2016		Set Depth (MD) (ftKB) 822		Stick Up (ftKB) -33.7		Set Tension (kips)
Centralizers 9						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	UH-2 Wellhead	13 3/8	12.615	54.50	J-55		ST&C	2.88	34	37
1	Casing Pup Joint	13 3/8	12.615	54.50	J-55		ST&C	4.01	37	41
18	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	741.62	41	782
1	Float Collar	13 3/8	12.615	54.50	J-55		ST&C	1.50	782	784
1	Casing Joint	13 3/8	12.615	54.50	J-55		ST&C	36.45	784	820
1	Casing Shoe	13 3/8	12.615	54.50	J-55		ST&C	1.80	820	822

Intermediate Casing 1, Planned?-N, 4,568ftKB										
Casing Description Intermediate Casing 1		Wellbore Original Hole		Run Date 5/18/2016		Set Depth (MD) (ftKB) 4,568		Stick Up (ftKB) -35.7		Set Tension (kips)
Centralizers 28						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Casing Hanger	9 5/8	8.844	40.00	HCK-55		LT&C	0.63	36	36
1	Casing Pup Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4.08	36	40
106	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	4,441.35	40	4,482
1	Float Collar	9 5/8	8.844	40.00	HCK-55		LT&C	1.48	4,482	4,483
2	Casing Joint	9 5/8	8.844	40.00	HCK-55		LT&C	82.17	4,483	4,565
1	Float Shoe	9 5/8	8.844	40.00	HCK-55		LT&C	2.63	4,565	4,568

Production Casing, Planned?-N, 14,027ftKB										
Casing Description Production Casing		Wellbore Original Hole		Run Date 5/27/2016		Set Depth (MD) (ftKB) 14,027		Stick Up (ftKB) -33.5		Set Tension (kips)
Centralizers 71						Scratchers				
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.19	33	35
1	Hanger Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.28	35	39
204	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,483.08	39	8,522
1	Marker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.46	8,522	8,527
129	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,335.60	8,527	13,863
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,863	13,873
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.64	13,873	13,880



Cement Summary

Production Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016		Mud Line Elevation (ft)	Water Depth (ft)

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.83	13,880	13,889
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	40.67	13,889	13,930
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.91	13,930	13,940
1	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.48	13,940	13,941
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.74	13,941	13,980
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.41	13,980	13,983
1	Vibrator	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.23	13,983	13,985
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	39.46	13,985	14,024
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.67	14,024	14,027

Production Casing Cement, Casing, 5/27/2016 13:20

Cementing Start Date 5/27/2016		Cementing End Date 5/27/2016	Wellbore Original Hole
Evaluation Method Lift Pressure		Cement Evaluation Results	

Comment
Design lift pressure - 2100 psi

1, 3,850.0-14,043.0ftKB

Top Depth (ftKB) 3,850.0	Bottom Depth (ftKB) 14,043.0	Full Return? Y	Vol Cement Ret (bbl) 0.0	Top Plug? Y	Bottom Plug? Y
Initial Pump Rate (bbl/min) 5.5	Final Pump Rate (bbl/min) 4	Avg Pump Rate (bbl/min) 5	Final Pump Pressure (psi) 1,919.0	Plug Bump Pressure (psi) 2,115.0	
Pipe Reciprocated? N	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? N	Pipe RPM (rpm)	
Depth Tagged (MD) (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)	Drill Out Date	

Spacer

Fluid Type Spacer	Fluid Description MUDPUSH Express Spacer D047 - .2 gal/bbl B389 - .60 lb/bbl BW /V.Spacer D035 - 2801.3 lb/mgal	Quantity (sacks)	Class	Volume Pumped (bbl) 30.0	
Estimated Top (ftKB) 3,203.0	Estimated Bottom Depth (ftKB) 3,850.0	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)	
Free Water (%)	Density (lb/gal) 10.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description 50:50 Poz/H + .2% D046 + 6.5% D020 + 8% D154 + .2% D065 + 2lb/sk B288 + 2 lb/sk B289 + .03 GPS D017	Quantity (sacks) 630	Class H	Volume Pumped (bbl) 301.0	
Estimated Top (ftKB) 3,850.0	Estimated Bottom Depth (ftKB) 8,545.0	Percent Excess Pumped (%) 50.0	Yield (ft³/sack) 2.69	Fluid Mix Ratio (gal/sack) 15.77	
Free Water (%)	Density (lb/gal) 11.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)	

Cement Fluid Additives

Add	Type	Conc



Cement Summary

Production Casing Cement

Well Name SALADO DRAW WE 23 FED P7 003H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,165.00	Original RKB (ft) 3,197.60	Current RKB Elevation 3,197.60, 3/28/2016		Mud Line Elevation (ft)	Water Depth (ft)

Lead

Fluid Type Lead	Fluid Description TXI + 3% D020 + .2% D046 + .2% D065 + .4% D238 + .4% D013 + .06% D208 + .01 GPS D177	Quantity (sacks) 980	Class H	Volume Pumped (bbl) 279.0
Estimated Top (ftKB) 8,545.0	Estimated Bottom Depth (ftKB) 13,043.0	Percent Excess Pumped (%) 35.0	Yield (ft ³ /sack) 1.60	Fluid Mix Ratio (gal/sack) 8.66
Free Water (%)	Density (lb/gal) 12.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description Class H + 2% D046 + .2% D065 + .4% D167 + .15% D800 + 75% D151 + .1% D208	Quantity (sacks) 120	Class H	Volume Pumped (bbl) 46.0
Estimated Top (ftKB) 13,043.0	Estimated Bottom Depth (ftKB) 14,043.0	Percent Excess Pumped (%) 0.0	Yield (ft ³ /sack) 2.18	Fluid Mix Ratio (gal/sack) 9.55
Free Water (%)	Density (lb/gal) 15.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description 20 bbls Acetic Acid 289 bbls FW	Quantity (sacks)	Class	Volume Pumped (bbl) 309.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft ³ /sack)	Fluid Mix Ratio (gal/sack) 8.33
Free Water (%)	Density (lb/gal) 8.33	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc