

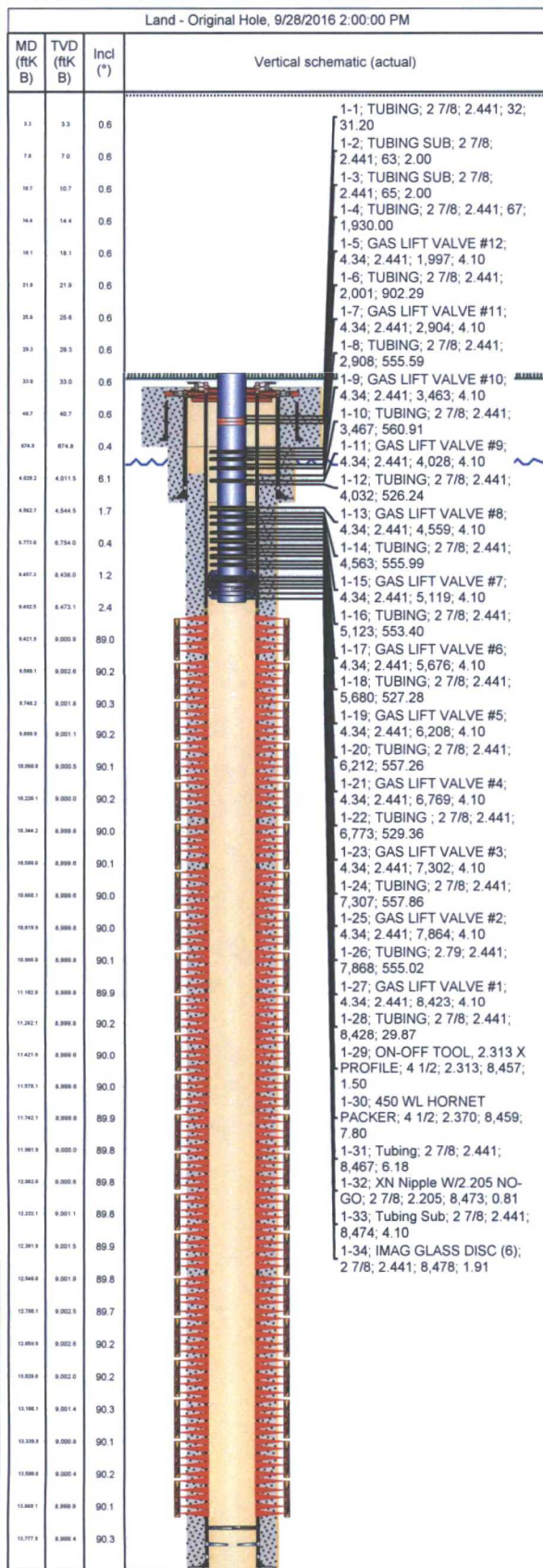


Tubing Summary

HOBBS OCD

DEC 05 2016

Well Name SALADO DRAW WE 23 FED P5 002H	Lease	Field Name JENNINGS	Business Unit Mid-Continent
Ground Elevation (ft) 3,156.00	Original RKB Elevation (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016	Mud Line Elevation (ft)
Current KB to Ground (ft) 32.60	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)



Tubing Strings									
Tubing Description		Planned Run?		Set Depth (MD) (ftKB)		Set Depth (TVD) (ftKB)			
TUBING		N		8,479.8		8,460.4			
Run Date 9/28/2016		Run Job Complete, 8/19/2016 07:00		Pull Date		Pull Job			
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
1	TUBING	2 7/8	2.441	6.50	L-80	8RD	31.20	32.0	63.2
1	TUBING SUB	2 7/8	2.441	6.50	L-80	8RD	2.00	63.2	65.2
1	TUBING SUB	2 7/8	2.441	6.50	L-80	8RD	2.00	65.2	67.2
62	TUBING	2 7/8	2.441	6.50	L-80	8RD	1,930.00	67.2	1,997.2
1	GAS LIFT VALVE #12	4.335	2.441			8RD	4.10	1,997.2	2,001.3
29	TUBING	2 7/8	2.441	6.50	L-80	8RD	902.29	2,001.3	2,903.6
1	GAS LIFT VALVE #11	4.335	2.441			8RD	4.10	2,903.6	2,907.7
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	555.59	2,907.7	3,463.3
1	GAS LIFT VALVE #10	4.335	2.441			8RD	4.10	3,463.3	3,467.4
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	560.91	3,467.4	4,028.3
1	GAS LIFT VALVE #9	4.335	2.441			8RD	4.10	4,028.3	4,032.4
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	526.24	4,032.4	4,558.6
1	GAS LIFT VALVE #8	4.335	2.441			8RD	4.10	4,558.6	4,562.7
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	555.99	4,562.7	5,118.7
1	GAS LIFT VALVE #7	4.335	2.441			8RD	4.10	5,118.7	5,122.8
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	553.40	5,122.8	5,676.2
1	GAS LIFT VALVE #6	4.335	2.441			8RD	4.10	5,676.2	5,680.3
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	527.28	5,680.3	6,207.6
1	GAS LIFT VALVE #5	4.335	2.441			8RD	4.10	6,207.6	6,211.7
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	557.26	6,211.7	6,769.0
1	GAS LIFT VALVE #4	4.335	2.441			8RD	4.10	6,769.0	6,773.1
17	TUBING	2 7/8	2.441	6.50	L-80	8RD	529.36	6,773.1	7,302.4
1	GAS LIFT VALVE #3	4.335	2.441			8RD	4.10	7,302.4	7,306.5
18	TUBING	2 7/8	2.441	6.50	L-80	8RD	557.86	7,306.5	7,864.4
1	GAS LIFT VALVE #2	4.335	2.441			8TRD	4.10	7,864.4	7,868.5
18	TUBING	2.785	2.441	6.50	L-80	8RD	555.02	7,868.5	8,423.5
1	GAS LIFT VALVE #1	4.335	2.441			8RD	4.10	8,423.5	8,427.6
1	TUBING	2 7/8	2.441	6.50	L-80	8RD	29.87	8,427.6	8,457.5
1	ON-OFF TOOL, 2.313 X PROFILE	4 1/2	2.313			8RD	1.50	8,457.5	8,459.0
1	450 WL HORNET PACKER	4 1/2	2.370			8RD	7.80	8,459.0	8,466.8
1	Tubing	2 7/8	2.441	6.50	L-80	8RD	6.18	8,466.8	8,473.0
1	XN Nipple W/2.205 NO-GO	2 7/8	2.205			8RD	0.81	8,473.0	8,473.8
1	Tubing Sub	2 7/8	2.441	6.50	L-80	8RD	4.10	8,473.8	8,477.9



Tubing Summary

Well Name SALADO DRAW WE 23 FED P5 002H	Lease	Field Name JENNINGS	Business Unit Mid-Continent
Ground Elevation (ft) 3,156.00	Original RKB Elevation (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016	Mud Line Elevation (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, 9/28/2016 2:00:00 PM			
MD (ftK B)	TVD (ftK B)	Incl (°)	Vertical schematic (actual)
3.3	3.3	0.6	1-1; TUBING; 2 7/8; 2.441; 32; 31.20
7.8	7.0	0.6	1-2; TUBING SUB; 2 7/8; 2.441; 63; 2.00
16.7	10.7	0.6	1-3; TUBING SUB; 2 7/8; 2.441; 65; 2.00
16.6	14.4	0.6	1-4; TUBING; 2 7/8; 2.441; 67; 1,930.00
16.1	16.1	0.6	1-5; GAS LIFT VALVE #12; 4.34; 2.441; 1,997; 4.10
21.8	21.8	0.6	1-6; TUBING; 2 7/8; 2.441; 2,001; 902.29
26.8	25.8	0.6	1-7; GAS LIFT VALVE #11; 4.34; 2.441; 2,904; 4.10
26.3	26.3	0.6	1-8; TUBING; 2 7/8; 2.441; 2,908; 555.59
33.0	33.0	0.6	1-9; GAS LIFT VALVE #10; 4.34; 2.441; 3,463; 4.10
40.7	40.7	0.6	1-10; TUBING; 2 7/8; 2.441; 3,467; 560.91
476.9	474.9	0.4	1-11; GAS LIFT VALVE #9; 4.34; 2.441; 4,028; 4.10
4,026.2	4,011.5	6.1	1-12; TUBING; 2 7/8; 2.441; 4,032; 526.24
4,982.7	4,944.5	1.7	1-13; GAS LIFT VALVE #8; 4.34; 2.441; 4,559; 4.10
6,773.8	6,754.0	0.4	1-14; TUBING; 2 7/8; 2.441; 4,563; 555.99
8,467.3	8,438.0	1.2	1-15; GAS LIFT VALVE #7; 4.34; 2.441; 5,119; 4.10
8,982.8	8,473.1	2.4	1-16; TUBING; 2 7/8; 2.441; 5,123; 553.40
9,407.9	9,000.9	89.0	1-17; GAS LIFT VALVE #6; 4.34; 2.441; 5,676; 4.10
9,886.1	9,002.6	90.2	1-18; TUBING; 2 7/8; 2.441; 5,680; 527.28
9,740.2	9,001.8	90.3	1-19; GAS LIFT VALVE #5; 4.34; 2.441; 6,208; 4.10
9,888.9	9,001.1	90.2	1-20; TUBING; 2 7/8; 2.441; 6,212; 557.26
10,968.8	9,000.6	90.1	1-21; GAS LIFT VALVE #4; 4.34; 2.441; 6,769; 4.10
10,228.1	9,000.0	90.2	1-22; TUBING; 2 7/8; 2.441; 6,773; 529.36
10,264.2	9,000.8	90.0	1-23; GAS LIFT VALVE #3; 4.34; 2.441; 7,302; 4.10
10,900.8	9,000.8	90.1	1-24; TUBING; 2 7/8; 2.441; 7,307; 557.86
10,660.1	9,000.0	90.0	1-25; GAS LIFT VALVE #2; 4.34; 2.441; 7,864; 4.10
10,819.9	9,000.8	90.0	1-26; TUBING; 2 7/8; 2.441; 7,868; 555.02
10,988.8	9,000.8	90.1	1-27; GAS LIFT VALVE #1; 4.34; 2.441; 8,423; 4.10
11,742.0	9,000.8	89.9	1-28; TUBING; 2 7/8; 2.441; 8,428; 29.87
11,302.1	9,000.8	90.2	1-29; ON-OFF TOOL, 2.313 X PROFILE; 4 1/2; 2.313; 8,457; 1.50
11,421.9	9,000.6	90.0	1-30; 450 WL HORNET PACKER; 4 1/2; 2.370; 8,459; 7.80
11,876.1	9,000.6	89.9	1-31; Tubing; 2 7/8; 2.441; 8,467; 6.18
11,742.1	9,000.6	89.9	1-32; XN Nipple W/2.205 NO-GO; 2 7/8; 2.205; 8,473; 0.81
11,981.9	9,000.0	89.8	1-33; Tubing Sub; 2 7/8; 2.441; 8,474; 4.10
12,062.8	9,000.8	89.8	1-34; IMAG GLASS DISC (6); 2 7/8; 2.441; 8,478; 1.91
12,022.1	9,001.1	89.8	
12,391.9	9,001.8	89.9	
12,948.9	9,001.8	89.8	
13,706.1	9,002.5	89.7	
12,889.9	9,002.6	90.2	
13,828.9	9,002.0	90.2	
13,188.1	9,001.4	90.3	
13,238.9	9,000.8	90.1	
13,886.8	9,000.4	90.2	
13,460.1	9,000.9	90.1	
13,777.9	9,000.4	90.3	
13,991.1	9,000.1		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
1	IMAG GLASS DISC (6)	2 7/8	2.441			8RD	1.91	8,477.9	8,479.8

Rod Strings

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

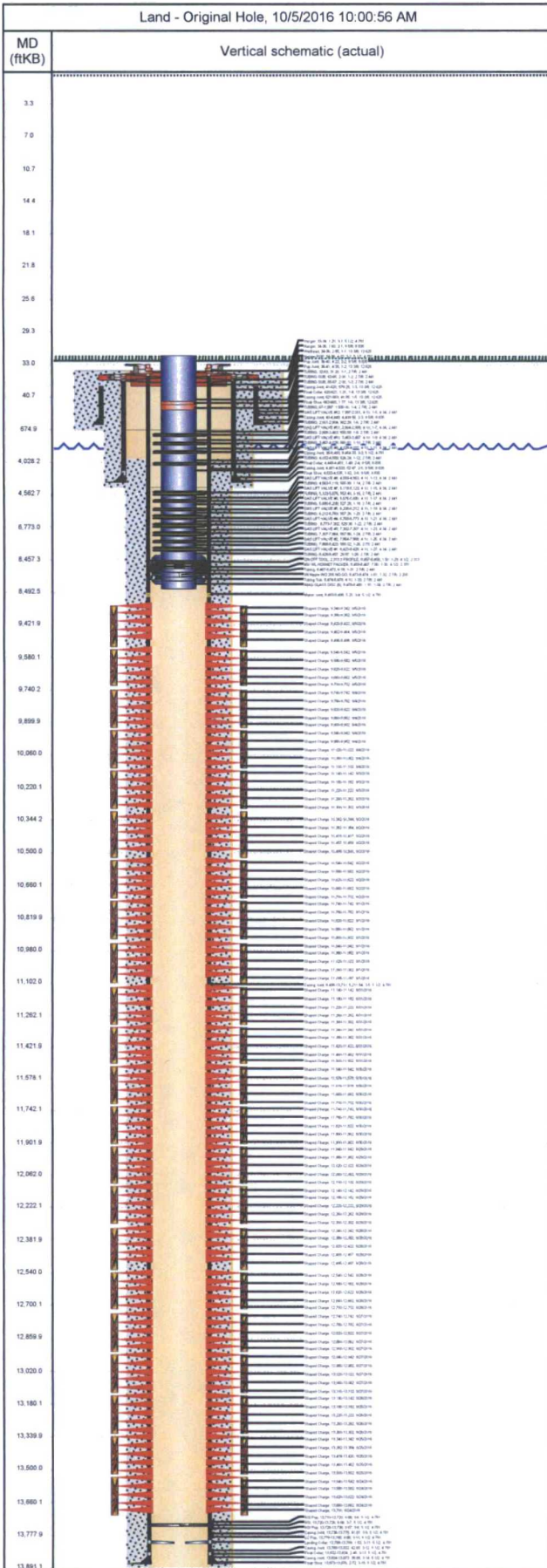
Rod Components

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



Wellbore Schematic

Well Name SALADO DRAW WE 23 FED P5 002H	Lease	Field Name JENNINGS	Business Unit Mid-Continent
--	-------	------------------------	--------------------------------



Job Details		
Job Category	Start Date	Rig/Unit End Date
Completion	8/19/2016	8/24/2016
Completion	8/24/2016	9/8/2016
Completion	9/8/2016	9/17/2016
Completion	9/27/2016	

Casing Strings					
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (MD) (ftKB)
Surface	13 3/8	54.50	J-55	ST&C	665
Intermediate Casing 1	9 5/8	40.00	HCK-55	LT&C	4,535
Production Casing	5 1/2	20.00	HCP-110	TXP-BTC-S	13,876

Tubing Strings			
TUBING set at 8,479.8ftKB on 9/28/2016 14:00			
Tubing Description	Run Date	String Length (ft)	Set Depth (MD) (ftKB)
TUBING	9/28/2016	8,447.77	8,479.8

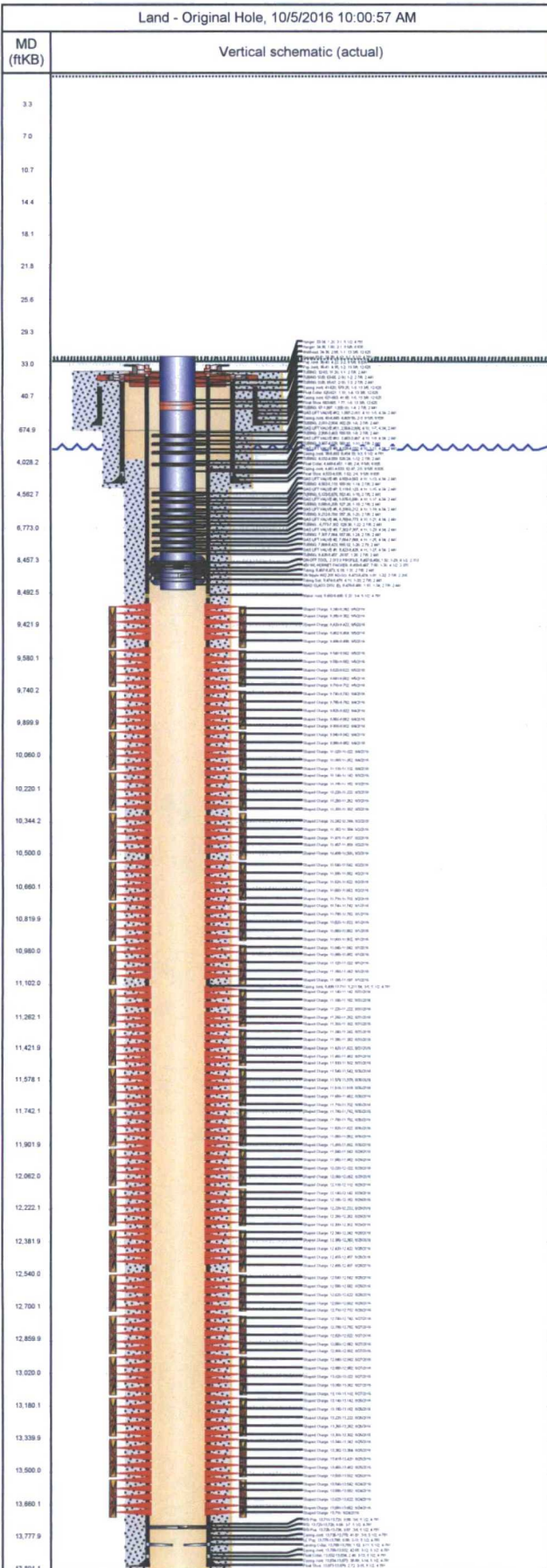
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Btm (ftKB)
TUBING	1	2 7/8	6.50	L-80	31.20	63.2
TUBING SUB	1	2 7/8	6.50	L-80	2.00	65.2
TUBING SUB	1	2 7/8	6.50	L-80	2.00	67.2
TUBING	62	2 7/8	6.50	L-80	1,930.00	1,997.2
GAS LIFT VALVE #12	1	4.335			4.10	2,001.3
TUBING	29	2 7/8	6.50	L-80	902.29	2,903.6
GAS LIFT VALVE #11	1	4.335			4.10	2,907.7
TUBING	18	2 7/8	6.50	L-80	555.59	3,463.3
GAS LIFT VALVE #10	1	4.335			4.10	3,467.4
TUBING	18	2 7/8	6.50	L-80	560.91	4,028.3
GAS LIFT VALVE #9	1	4.335			4.10	4,032.4
TUBING	17	2 7/8	6.50	L-80	526.24	4,558.6
GAS LIFT VALVE #8	1	4.335			4.10	4,562.7
TUBING	18	2 7/8	6.50	L-80	555.99	5,118.7
GAS LIFT VALVE #7	1	4.335			4.10	5,122.8
TUBING	18	2 7/8	6.50	L-80	553.40	5,676.2
GAS LIFT VALVE #6	1	4.335			4.10	5,680.3
TUBING	17	2 7/8	6.50	L-80	527.28	6,207.6
GAS LIFT VALVE #5	1	4.335			4.10	6,211.7
TUBING	18	2 7/8	6.50	L-80	557.26	6,769.0
GAS LIFT VALVE #4	1	4.335			4.10	6,773.1
TUBING	17	2 7/8	6.50	L-80	529.36	7,302.4
GAS LIFT VALVE #3	1	4.335			4.10	7,306.5
TUBING	18	2 7/8	6.50	L-80	557.86	7,864.4
GAS LIFT VALVE #2	1	4.335			4.10	7,868.5
TUBING	18	2.785	6.50	L-80	555.02	8,423.5
GAS LIFT VALVE #1	1	4.335			4.10	8,427.6
TUBING	1	2 7/8	6.50	L-80	29.87	8,457.5
ON-OFF TOOL, 2.313 X PROFILE	1	4 1/2			1.50	8,459.0
450 WL HORNET PACKER	1	4 1/2			7.80	8,466.8
Tubing	1	2 7/8	6.50	L-80	6.18	8,473.0
XN Nipple W/2.205 NO-GO	1	2 7/8			0.81	8,473.8
Tubing Sub	1	2 7/8	6.50	L-80	4.10	8,477.9
IMAG GLASS DISC (6)	1	2 7/8			1.91	8,479.8

Perforations					
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
9/5/2016	9,340.0	9,342.0	6.0	12	Avalon, Original Hole
9/5/2016	9,380.0	9,382.0	6.0	12	Avalon, Original Hole
9/5/2016	9,420.0	9,422.0	6.0	12	Avalon, Original Hole
9/5/2016	9,462.0	9,464.0	6.0	12	Avalon, Original Hole
9/5/2016	9,496.0	9,498.0	6.0	12	Avalon, Original Hole
9/5/2016	9,540.0	9,542.0	6.0	12	Avalon, Original Hole
9/5/2016	9,580.0	9,582.0	6.0	12	Avalon, Original Hole



Wellbore Schematic

Well Name SALADO DRAW WE 23 FED P5 002H	Lease JENNINGS	Field Name JENNINGS	Business Unit Mid-Continent
--	-------------------	------------------------	--------------------------------



Perforations					
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Linked Zone
9/5/2016	9,620.0	9,622.0	6.0	12	Avalon, Original Hole
9/5/2016	9,660.0	9,662.0	6.0	12	Avalon, Original Hole
9/5/2016	9,700.0	9,702.0	6.0	12	Avalon, Original Hole
9/4/2016	9,740.0	9,742.0	6.0	12	Avalon, Original Hole
9/4/2016	9,780.0	9,782.0	6.0	12	Avalon, Original Hole
9/4/2016	9,820.0	9,822.0	6.0	12	Avalon, Original Hole
9/4/2016	9,860.0	9,862.0	6.0	12	Avalon, Original Hole
9/4/2016	9,900.0	9,902.0	6.0	12	Avalon, Original Hole
9/4/2016	9,940.0	9,942.0	6.0	12	Avalon, Original Hole
9/4/2016	9,980.0	9,982.0	6.0	12	Avalon, Original Hole
9/4/2016	10,020.0	10,022.0	6.0	12	Avalon, Original Hole
9/4/2016	10,060.0	10,062.0	6.0	12	Avalon, Original Hole
9/4/2016	10,100.0	10,102.0	6.0	12	Avalon, Original Hole
9/3/2016	10,140.0	10,142.0	6.0	12	Avalon, Original Hole
9/3/2016	10,180.0	10,182.0	6.0	12	Avalon, Original Hole
9/3/2016	10,220.0	10,222.0	6.0	12	Avalon, Original Hole
9/3/2016	10,260.0	10,262.0	6.0	12	Avalon, Original Hole
9/3/2016	10,300.0	10,302.0	6.0	12	Avalon, Original Hole
9/2/2016	10,342.0	10,344.0	6.0	12	Avalon, Original Hole
9/2/2016	10,382.0	10,384.0	6.0	12	Avalon, Original Hole
9/2/2016	10,415.0	10,417.0	6.0	12	Avalon, Original Hole
9/2/2016	10,457.0	10,459.0	6.0	12	Avalon, Original Hole
9/2/2016	10,498.0	10,500.0	6.0	12	Avalon, Original Hole
9/2/2016	10,540.0	10,542.0	6.0	12	Avalon, Original Hole
9/2/2016	10,580.0	10,582.0	6.0	12	Avalon, Original Hole
9/2/2016	10,620.0	10,622.0	6.0	12	Avalon, Original Hole
9/2/2016	10,660.0	10,662.0	6.0	12	Avalon, Original Hole
9/2/2016	10,700.0	10,702.0	6.0	12	Avalon, Original Hole
9/1/2016	10,740.0	10,742.0	6.0	12	Avalon, Original Hole
9/1/2016	10,780.0	10,782.0	6.0	12	Avalon, Original Hole
9/1/2016	10,820.0	10,822.0	6.0	12	Avalon, Original Hole
9/1/2016	10,860.0	10,862.0	6.0	12	Avalon, Original Hole
9/1/2016	10,900.0	10,902.0	6.0	12	Avalon, Original Hole
9/1/2016	10,940.0	10,942.0	6.0	12	Avalon, Original Hole
9/1/2016	10,980.0	10,982.0	6.0	12	Avalon, Original Hole
9/1/2016	11,020.0	11,022.0	6.0	12	Avalon, Original Hole
9/1/2016	11,060.0	11,062.0	6.0	12	Avalon, Original Hole
9/1/2016	11,095.0	11,097.0	6.0	12	Avalon, Original Hole
8/31/2016	11,140.0	11,142.0	6.0	12	Avalon, Original Hole
8/31/2016	11,180.0	11,182.0	6.0	12	Avalon, Original Hole
8/31/2016	11,220.0	11,222.0	6.0	12	Avalon, Original Hole
8/31/2016	11,260.0	11,262.0	6.0	12	Avalon, Original Hole
8/31/2016	11,300.0	11,302.0	6.0	12	Avalon, Original Hole
8/31/2016	11,340.0	11,342.0	6.0	12	Avalon, Original Hole
8/31/2016	11,380.0	11,382.0	6.0	12	Avalon, Original Hole
8/31/2016	11,420.0	11,422.0	6.0	12	Avalon, Original Hole
8/31/2016	11,460.0	11,462.0	6.0	12	Avalon, Original Hole
8/31/2016	11,500.0	11,502.0	6.0	12	Avalon, Original Hole
8/30/2016	11,540.0	11,542.0	6.0	12	Avalon, Original Hole
8/30/2016	11,576.0	11,578.0	6.0	12	Avalon, Original Hole
8/30/2016	11,616.0	11,618.0	6.0	12	Avalon, Original Hole
8/30/2016	11,660.0	11,662.0	6.0	12	Avalon, Original Hole
8/30/2016	11,700.0	11,702.0	6.0	12	Avalon, Original Hole
8/30/2016	11,740.0	11,742.0	6.0	12	Avalon, Original Hole
8/30/2016	11,780.0	11,782.0	6.0	12	Avalon, Original Hole
8/30/2016	11,820.0	11,822.0	6.0	12	Avalon, Original Hole
8/30/2016	11,860.0	11,862.0	6.0	12	Avalon, Original Hole
8/30/2016	11,900.0	11,902.0	6.0	12	Avalon, Original Hole

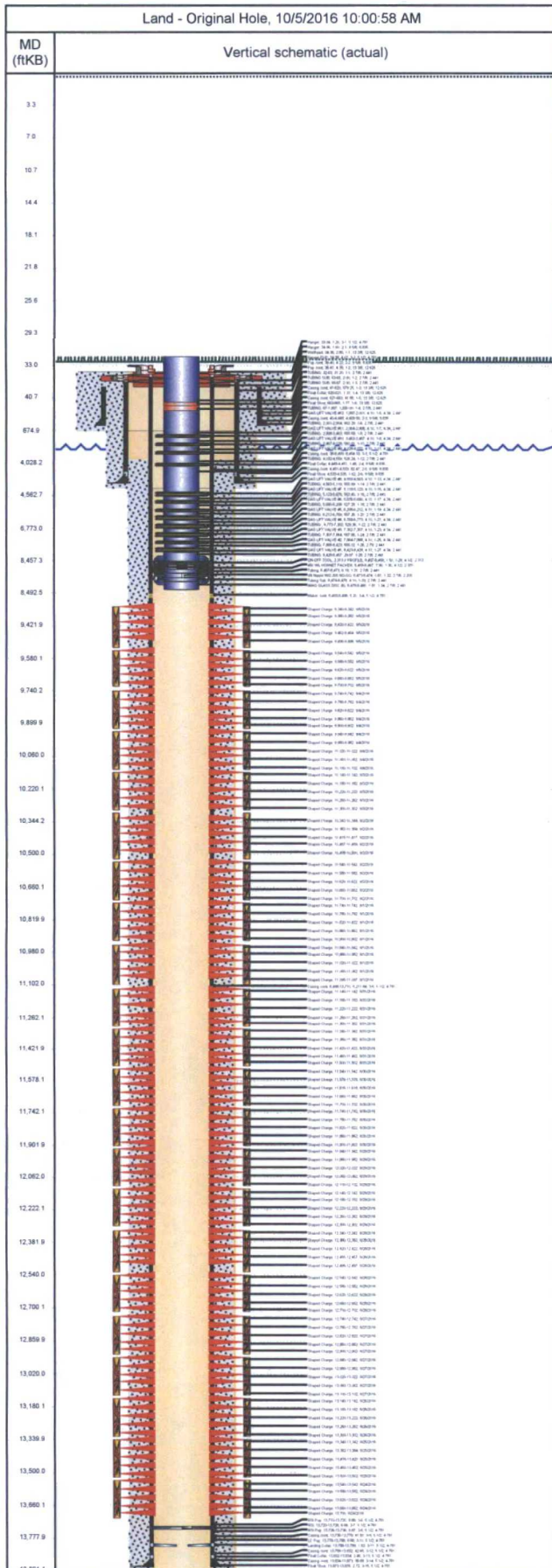


Other Strings					
Run Date	Pull Date	Set Depth (ftKB)	Com		
Other In Hole					
Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Packer (retrievable)	8,456.0	8,479.0	9/16/2016		
Composite Frac Plug (drop ball)	9,520.0	9,522.0	9/5/2016	9/11/2016	Stage 22
Composite Frac Plug (drop ball)	9,720.0	9,722.0	9/5/2016	9/11/2016	Stage 21
Composite Frac Plug (drop ball)	9,923.0	9,925.0	9/4/2016	9/11/2016	Stage 20



Wellbore Schematic

Well Name SALADO DRAW WE 23 FED P5 002H	Lease	Field Name JENNINGS	Business Unit Mid-Continent
--	-------	------------------------	--------------------------------



Other In Hole					
Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Composite Frac Plug (drop ball)	10,120.0	10,122.0	9/4/2016	9/11/2016	Stage 19
Composite Frac Plug (drop ball)	10,320.0	10,322.0	9/3/2016	9/11/2016	Stage 18
Composite Frac Plug (drop ball)	10,520.0	10,522.0	9/2/2016	9/11/2016	Stage 17
Composite Frac Plug (drop ball)	10,720.0	10,722.0	9/2/2016	9/11/2016	Stage 16
Composite Frac Plug (drop ball)	10,920.0	10,922.0	9/1/2016	9/11/2016	Stage 15
Composite Frac Plug (drop ball)	11,113.0	11,115.0	9/1/2016	9/11/2016	Stage 14
Composite Frac Plug (drop ball)	11,320.0	11,322.0	8/31/2016	9/11/2016	Stage 13
Composite Frac Plug (drop ball)	11,520.0	11,522.0	8/31/2016	9/11/2016	Stage 12
Composite Frac Plug (drop ball)	11,720.0	11,722.0	8/30/2016	9/11/2016	Stage 11
Composite Frac Plug (drop ball)	11,923.0	11,925.0	8/30/2016	9/11/2016	Stage 10
Composite Frac Plug (drop ball)	12,120.0	12,122.0	8/29/2016	9/11/2016	Stage 9
Composite Frac Plug (drop ball)	12,320.0	12,322.0	8/29/2016	9/11/2016	Stage 8
Composite Frac Plug (drop ball)	12,520.0	12,522.0	8/28/2016	9/11/2016	Stage 7
Composite Frac Plug (drop ball)	12,720.0	12,722.0	8/28/2016	9/11/2016	Stage 6
Composite Frac Plug (drop ball)	12,922.0	12,924.0	8/27/2016	9/11/2016	Stage 5
Composite Frac Plug (drop ball)	13,120.0	13,122.0	8/27/2016	9/11/2016	Stage 4
Composite Frac Plug (drop ball)	13,320.0	13,322.0	8/26/2016	9/11/2016	Stage 3
Composite Frac Plug (drop ball)	13,520.0	13,522.0	8/25/2016	9/11/2016	Stage 2
				9/11/2016	



Casing Summary

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Surface, Planned?-N, 665ftKB

Set Depth (MD) (ftKB) 665		Set Tension (kips)		String Nominal OD (in) 13 3/8		String Min Drift (in) 12.469		Centralizers 8		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Wellhead	13 3/8	12.625	54.50	J-55	ST&C	34	36	2.85	2,730.0	1,130.0
1	Pup Joint	13 3/8	12.625	54.50	J-55	ST&C	36	41	4.35	2,730.0	1,130.0
14	Casing Joint	13 3/8	12.625	54.50	J-55	ST&C	41	620	579.25	2,730.0	1,130.0
1	Float Collar	13 3/8	12.625	54.50	J-55	ST&C	620	621	1.31	2,730.0	1,130.0
1	Casing Joint	13 3/8	12.625	54.50	J-55	ST&C	621	663	41.85	2,730.0	1,130.0
1	Float Shoe	13 3/8	12.625	54.50	J-55	ST&C	663	665	1.77	2,730.0	1,130.0

Intermediate Casing 1, Planned?-N, 4,535ftKB

Set Depth (MD) (ftKB) 4,535		Set Tension (kips)		String Nominal OD (in) 9 5/8		String Min Drift (in)		Centralizers 30		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Hanger	9 5/8	8.835	40.00	HCK-55	LT&C	34	36	1.60		
1	Pup Joint	9 5/8	8.835	40.00	HCK-55	LT&C	36	40	4.22		
10	Casing Joint	9 5/8	8.835	40.00	HCK-55	LT&C	40	4,449	4,409.56		
5											
1	Float Collar	9 5/8	8.835	40.00	HCK-55	LT&C	4,449	4,451	1.48		
2	Casing Joint	9 5/8	8.835	40.00	HCK-55	LT&C	4,451	4,533	82.47		
1	Float Shoe	9 5/8	8.835	40.00	HCK-55	LT&C	4,533	4,535	1.62		

Production Casing, Planned?-N, 13,876ftKB

Set Depth (MD) (ftKB) 13,876		Set Tension (kips)		String Nominal OD (in) 5 1/2		String Min Drift (in)		Centralizers 102		Scratchers	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)	Len (ft)	P Burst (psi)	P Collapse (psi)
1	Hanger	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	33	34	1.20		
1	Hanger PUP	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	34	38	4.02		
20 5	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	38	8,493	8,454.33		
1	Maker Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	8,493	8,498	5.20		
12 5	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	8,498	13,710	5,211.84		
1	RSI Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,710	13,720	9.88		
1	RSI	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,720	13,726	6.66		
1	RSI Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,726	13,736	9.87		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,736	13,778	41.81		
1	LC Pup	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,778	13,788	9.88		
1	Landing Collar	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,788	13,789	1.53		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,789	13,832	42.65		
1	Float Collar	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,832	13,834	2.46		
1	Casing Joint	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,834	13,873	38.89		
1	Float Shoe	5 1/2	4.781	20.00	HCP-110	TXP-BTC-S	13,873	13,876	2.72		



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Original Hole

Wellbore Name Original Hole	Directional Type Horizontal	Min Kick Off Depth (ftKB)	Vertical Section Direction (*) 176.40
Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)	
17 1/2	33.6	675.0	
12 1/4	675.0	4,545.0	
8 3/4	4,545.0	13,891.0	

Multi-bowl, FMC on 6/16/2016 19:00

Sub-Type Multi-bowl		Install Date 6/16/2016			
Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 665ftKB

Casing Description Surface	Wellbore Original Hole	Run Date 6/16/2016	Set Depth (MD) (ftKB) 665	Stick Up (ftKB) -33.6	Set Tension (kips)
Centralizers 8			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	Wellhead	13 3/8	12.625	54.50	J-55		ST&C	2.85	34	36
1	Pup Joint	13 3/8	12.625	54.50	J-55		ST&C	4.35	36	41
14	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	579.25	41	620
1	Float Collar	13 3/8	12.625	54.50	J-55		ST&C	1.31	620	621
1	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	41.85	621	663
1	Float Shoe	13 3/8	12.625	54.50	J-55		ST&C	1.77	663	665

Intermediate Casing 1, Planned?-N, 4,535ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 6/20/2016	Set Depth (MD) (ftKB) 4,535	Stick Up (ftKB) -34.0	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	9 5/8	8.835	40.00	HCK-55		LT&C	1.60	34	36
1	Pup Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4.22	36	40
105	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4,409.56	40	4,449
1	Float Collar	9 5/8	8.835	40.00	HCK-55		LT&C	1.48	4,449	4,451
2	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	82.47	4,451	4,533
1	Float Shoe	9 5/8	8.835	40.00	HCK-55		LT&C	1.62	4,533	4,535

Production Casing, Planned?-N, 13,876ftKB

Casing Description Production Casing	Wellbore Original Hole	Run Date 6/28/2016	Set Depth (MD) (ftKB) 13,876	Stick Up (ftKB) -33.1	Set Tension (kips)
Centralizers 102			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	1.20	33	34
1	Hanger PUP	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.02	34	38
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,454.33	38	8,493
1	Maker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.20	8,493	8,498
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,211.84	8,498	13,710
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,710	13,720
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.66	13,720	13,726
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.87	13,726	13,736
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	41.81	13,736	13,778
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,778	13,788



Cement Summary

Surface Casing Cement

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		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	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.53	13,788	13,789
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.65	13,789	13,832
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.46	13,832	13,834
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.89	13,834	13,873
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.72	13,873	13,876

Surface Casing Cement, Casing, 6/16/2016 20:00

Cementing Start Date 6/16/2016		Cementing End Date 6/16/2016		Wellbore Original Hole	
Evaluation Method Returns to Surface		Cement Evaluation Results 96 bbls cmt to surface			
Comment					

1, 33.6-665.0ftKB

Top Depth (ftKB) 33.6	Bottom Depth (ftKB) 665.0	Full Return? Y	Vol Cement Ret (bbl) 96.0	Top Plug? Y	Bottom Plug? N
Initial Pump Rate (bbl/min) 3	Final Pump Rate (bbl/min) 2.2	Avg Pump Rate (bbl/min) 5.5		Final Pump Pressure (psi) 280.0	Plug Bump Pressure (psi) 855.0
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 FW w/ Dye	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) 845	Class C	Volume Pumped (bbl) 197.0	
Estimated Top (ftKB) 33.6	Estimated Bottom Depth (ftKB) 680.0	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 Water Base Mud	Quantity (sacks)	Class	Volume Pumped (bbl) 94.0	
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)	
Free Water (%)	Density (lb/gal) 8.60	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 P5-002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Original Hole				
Wellbore Name		Directional Type	Min Kick Off Depth (ftKB)	Vertical Section Direction (*)
Original Hole		Horizontal		176.40
Hole Size (in)	Act Top (ftKB)		Act Btm (ftKB)	
17 1/2	33.6		675.0	
12 1/4	675.0		4,545.0	
8 3/4	4,545.0		13,891.0	

Multi-bowl, FMC on 6/16/2016 19:00

Sub-Type Multi-bowl		Install Date 6/16/2016			
Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 665ftKB

Casing Description Surface	Wellbore Original Hole	Run Date 6/16/2016	Set Depth (MD) (ftKB) 665	Stick Up (ftKB) -33.6	Set Tension (kips)
Centralizers 8			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	Wellhead	13 3/8	12.625	54.50	J-55		ST&C	2.85	34	36
1	Pup Joint	13 3/8	12.625	54.50	J-55		ST&C	4.35	36	41
14	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	579.25	41	620
1	Float Collar	13 3/8	12.625	54.50	J-55		ST&C	1.31	620	621
1	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	41.85	621	663
1	Float Shoe	13 3/8	12.625	54.50	J-55		ST&C	1.77	663	665

Intermediate Casing 1, Planned?-N, 4,535ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 6/20/2016	Set Depth (MD) (ftKB) 4,535	Stick Up (ftKB) -34.0	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	9 5/8	8.835	40.00	HCK-55		LT&C	1.60	34	36
1	Pup Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4.22	36	40
105	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4,409.56	40	4,449
1	Float Collar	9 5/8	8.835	40.00	HCK-55		LT&C	1.48	4,449	4,451
2	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	82.47	4,451	4,533
1	Float Shoe	9 5/8	8.835	40.00	HCK-55		LT&C	1.62	4,533	4,535

Production Casing, Planned?-N, 13,876ftKB

Casing Description Production Casing	Wellbore Original Hole	Run Date 6/28/2016	Set Depth (MD) (ftKB) 13,876	Stick Up (ftKB) -33.1	Set Tension (kips)
Centralizers 102			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	1.20	33	34
1	Hanger PUP	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.02	34	38
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,454.33	38	8,493
1	Marker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.20	8,493	8,498
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,211.84	8,498	13,710
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,710	13,720
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.66	13,720	13,726
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.67	13,726	13,736
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	41.81	13,736	13,778
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,778	13,788



Cement Summary

Intermediate Casing Cement

Well Name SALADO DRAW WE 23 FED P5 002H		Lease		Field Name JENNINGS		Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016				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	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.53	13,788	13,789
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.65	13,789	13,832
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.46	13,832	13,834
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.89	13,834	13,873
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.72	13,873	13,876

Intermediate Casing Cement, Casing, 6/21/2016 05:16

Cementing Start Date 6/21/2016		Cementing End Date 6/21/2016		Wellbore Original Hole	
Evaluation Method Returns to Surface		Cement Evaluation Results 201 bbl /468 sx CMT to surface			

Comment
Design lift pressure - 901 psi

1, 33.6-4,545.0ftKB

Top Depth (ftKB) 33.6	Bottom Depth (ftKB) 4,545.0	Full Return? Y	Vol Cement Ret (bbl) 201.0	Top Plug? Y	Bottom Plug? N
Initial Pump Rate (bbl/min) 4.3	Final Pump Rate (bbl/min) 2	Avg Pump Rate (bbl/min) 5.9		Final Pump Pressure (psi) 1,012.0	Plug Bump Pressure (psi) 1,500.0
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)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.30	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description 50:50 POZ/C	Quantity (sacks) 1,032	Class C	Volume Pumped (bbl) 443.0
Estimated Top (ftKB) 33.6	Estimated Bottom Depth (ftKB) 3,535.0	Percent Excess Pumped (%) 150.0	Yield (ft³/sack) 2.41	Fluid Mix Ratio (gal/sack) 13.65
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) 462	Class C	Volume Pumped (bbl) 109.0
Estimated Top (ftKB) 3,535.0	Estimated Bottom Depth (ftKB) 4,545.0	Percent Excess Pumped (%) 85.0	Yield (ft³/sack) 1.33	Fluid Mix Ratio (gal/sack) 6.35
Free Water (%)	Density (lb/gal) 14.80	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description Displacement	Quantity (sacks)	Class	Volume Pumped (bbl) 337.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Fluid Mix Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 8.90	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 P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Original Hole			
Wellbore Name	Directional Type	Min Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Horizontal		176.40
Hole Size (in)	Act Top (ftKB)		Act Btm (ftKB)
17 1/2	33.6		675.0
12 1/4	675.0		4,545.0
8 3/4	4,545.0		13,891.0

Multi-bowl, FMC on 6/16/2016 19:00

Sub-Type Multi-bowl		Install Date 6/16/2016			
Des	Make	Model	WP (psi)	Service	SN

Surface, Planned?-N, 665ftKB

Casing Description Surface	Wellbore Original Hole	Run Date 6/16/2016	Set Depth (MD) (ftKB) 665	Stick Up (ftKB) -33.6	Set Tension (kips)
Centralizers 8			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	Wellhead	13 3/8	12.625	54.50	J-55		ST&C	2.85	34	36
1	Pup Joint	13 3/8	12.625	54.50	J-55		ST&C	4.35	36	41
14	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	579.25	41	620
1	Float Collar	13 3/8	12.625	54.50	J-55		ST&C	1.31	620	621
1	Casing Joint	13 3/8	12.625	54.50	J-55		ST&C	41.85	621	663
1	Float Shoe	13 3/8	12.625	54.50	J-55		ST&C	1.77	663	665

Intermediate Casing 1, Planned?-N, 4,535ftKB

Casing Description Intermediate Casing 1	Wellbore Original Hole	Run Date 6/20/2016	Set Depth (MD) (ftKB) 4,535	Stick Up (ftKB) -34.0	Set Tension (kips)
Centralizers 30			Scratchers		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Conn Sz (in)	Top Thread	Len (ft)	Top Depth (MD) (ftKB)	Btm Depth (MD) (ftKB)
1	Hanger	9 5/8	8.835	40.00	HCK-55		LT&C	1.60	34	36
1	Pup Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4.22	36	40
105	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	4,409.56	40	4,449
1	Float Collar	9 5/8	8.835	40.00	HCK-55		LT&C	1.48	4,449	4,451
2	Casing Joint	9 5/8	8.835	40.00	HCK-55		LT&C	82.47	4,451	4,533
1	Float Shoe	9 5/8	8.835	40.00	HCK-55		LT&C	1.82	4,533	4,535

Production Casing, Planned?-N, 13,876ftKB

Casing Description Production Casing	Wellbore Original Hole	Run Date 6/28/2016	Set Depth (MD) (ftKB) 13,876	Stick Up (ftKB) -33.1	Set Tension (kips)
Centralizers 102			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	1.20	33	34
1	Hanger PUP	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	4.02	34	38
205	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	8,454.33	38	8,493
1	Marker Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5.20	8,493	8,498
125	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	5,211.84	8,498	13,710
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,710	13,720
1	RSI	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	6.66	13,720	13,726
1	RSI Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.87	13,726	13,736
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	41.81	13,736	13,778
1	LC Pup	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	9.88	13,778	13,788



Cement Summary

Production Casing Cement

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		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	Landing Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	1.53	13,788	13,789
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	42.65	13,789	13,832
1	Float Collar	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.46	13,832	13,834
1	Casing Joint	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	38.89	13,834	13,873
1	Float Shoe	5 1/2	4.781	20.00	HCP-110		TXP-BTC-S	2.72	13,873	13,876

Production Casing Cement, Casing, 6/29/2016 14:30

Cementing Start Date 6/29/2016	Cementing End Date 6/29/2016	Wellbore Original Hole
-----------------------------------	---------------------------------	---------------------------

Evaluation Method Lift Pressure	Cement Evaluation Results FCP of 1,650 psi. Expected lift pressure of 1,049 psi.
------------------------------------	---

Comment
Test surface lines to 6,500 psi. Pump: 30 bbl of 10.0 ppg mudpush 303 bbl (625 sxs) of 11.5 ppg lead 1 cement slurry 274 bbl (963 sxs) of 12.5 ppg lead 2 cement slurry 47 bbl (120 sxs) of 15.0 ppg tail cement slurry 306 bbl of Displacement (8.3 FW) Held 850 psi over for 5 min. Bled back 2.25 bbls; floats held. FCP 1,650 psi @ 4.0 bpm. Full returns throughout job.

1, 3,550.0-13,891.0ftKB

Top Depth (ftKB) 3,550.0	Bottom Depth (ftKB) 13,891.0	Full Return? N	Vol Cement Ret (bbl) 0.0	Top Plug? Y	Bottom Plug? Y
Initial Pump Rate (bbl/min) 6.8	Final Pump Rate (bbl/min) 4	Avg Pump Rate (bbl/min) 6.8	Final Pump Pressure (psi) 1,650.0	Plug Bump Pressure (psi) 2,150.0	
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) 30.0
Estimated Top (ftKB) 2,904.0	Estimated Bottom Depth (ftKB) 3,550.0	Percent Excess Pumped (%) 0.0	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	Quantity (sacks) 625	Class H	Volume Pumped (bbl) 303.0
Estimated Top (ftKB) 3,550.0	Estimated Bottom Depth (ftKB) 4,550.0	Percent Excess Pumped (%) 50.0	Yield (ft³/sack) 2.72	Fluid Mix Ratio (gal/sack) 15.89
Free Water (%) 0.00	Density (lb/gal) 11.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi) 50.0

Cement Fluid Additives

Add	Type	Conc

Lead

Fluid Type Lead	Fluid Description	Quantity (sacks) 963	Class H	Volume Pumped (bbl) 274.0
Estimated Top (ftKB) 4,550.0	Estimated Bottom Depth (ftKB) 8,350.0	Percent Excess Pumped (%) 35.0	Yield (ft³/sack) 1.60	Fluid Mix Ratio (gal/sack) 8.62
Free Water (%) 0.00	Density (lb/gal) 12.50	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi) 50.0

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description	Quantity (sacks) 120	Class H	Volume Pumped (bbl) 47.0
Estimated Top (ftKB) 8,350.0	Estimated Bottom Depth (ftKB) 13,891.0	Percent Excess Pumped (%) 0.0	Yield (ft³/sack) 2.18	Fluid Mix Ratio (gal/sack) 9.55
Free Water (%) 0.00	Density (lb/gal) 15.00	Zero Gel Time (min)	Thickening Time (hr)	1st Compressive Strength (psi) 50.0



Cement Summary

Production Casing Cement

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Cement Fluid Additives

Add	Type	Conc

Displacement

Fluid Type Displacement	Fluid Description	Quantity (sacks)	Class	Volume Pumped (bbl) 306.0
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%) 0.0	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



Directional Survey

Well Name SALADO DRAW WE 23 FED P5 002H		Lease		Field Name JENNINGS		Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016			Mud Line Elevation (ft)		Water Depth (ft)

Wellbore Name Original Hole		Parent Wellbore Original Hole		Min-Kick Off Depth (ftKB)		Vertical Section Direction (°) 176.40	
Northing (Y) (ft)		Easting (X) (ft)		UTM Grid Zone			
Date 6/16/2016		Definitive? Y		Description MWD		Planned? N	
MD Tie In (ftKB)		TVD Tie In (ftKB)		Inclination Tie In (°)		Azimuth Tie In (°)	
						NSTie In (ft)	
						EWTie In (ft)	

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unuse d data
175	0.60	202.70	175.00	-0.85	-0.35	0.82	0.34	Magn MWD		0.34	0.92	115.83	N
178	0.60	192.70	178.00	-0.88	-0.36	0.85	3.49	Magn MWD		0.00	0.95	333.33	N
275	0.60	218.70	274.99	-1.77	-0.79	1.71	0.28	Magn MWD		0.00	1.94	26.80	N
362	0.60	211.70	361.99	-2.51	-1.32	2.42	0.08	Magn MWD		0.00	2.83	-8.05	N
365	0.70	207.70	364.99	-2.54	-1.33	2.45	3.66	Magn MWD		3.33	2.87	133.33	N
457	0.40	260.70	456.98	-3.14	-1.90	3.02	0.53	Magn MWD		-0.33	3.67	46.74	N
542	0.40	256.70	541.98	-3.31	-2.47	3.15	0.05	Magn MWD		0.00	4.13	7.06	N
555	0.40	253.70	554.98	-3.33	-2.55	3.17	0.16	Magn MWD		0.00	4.20	-23.08	N
639	0.50	294.70	638.98	-3.26	-3.17	3.06	0.39	Magn MWD		0.12	4.55	48.81	N
656	0.40	264.70	655.98	-3.24	-3.29	3.02	1.48	Magn MWD		-0.59	4.62	176.47	N
768	0.40	246.20	767.97	-3.43	-4.04	3.17	0.11	Magn MWD	Phoenix Directional	0.00	5.30	-16.52	N
895	0.60	238.90	894.97	-3.95	-5.02	3.63	0.16	Magn MWD	Phoenix Directional	0.16	6.39	-5.75	N
1,123	2.10	111.40	1,122.92	-6.09	-2.15	5.95	1.10	Magn MWD	Phoenix Directional	0.66	6.46	-55.92	N
1,301	5.70	102.00	1,300.48	-9.12	9.54	9.70	2.05	Magn MWD	Phoenix Directional	2.02	13.20	-5.28	N
1,478	7.10	99.80	1,476.38	-12.81	28.92	14.60	0.80	Magn MWD	Phoenix Directional	0.79	31.63	-1.24	N
1,655	7.20	99.50	1,652.00	-16.50	50.63	19.65	0.06	Magn MWD	Phoenix Directional	0.06	53.26	-0.17	N
1,832	7.40	100.60	1,827.57	-20.43	72.78	24.96	0.14	Magn MWD	Phoenix Directional	0.11	75.59	0.62	N
2,010	6.50	110.00	2,004.26	-25.99	93.51	31.81	0.81	Magn MWD	Phoenix Directional	-0.51	97.06	5.28	N
2,187	6.20	113.70	2,180.18	-33.26	111.68	40.20	0.29	Magn MWD	Phoenix Directional	-0.17	116.53	2.09	N
2,365	6.40	112.70	2,357.10	-40.95	129.63	49.01	0.13	Magn MWD	Phoenix Directional	0.11	135.95	-0.56	N
2,542	6.60	113.80	2,532.96	-48.86	148.04	58.06	0.13	Magn MWD	Phoenix Directional	0.11	155.90	0.62	N
2,720	5.56	120.10	2,709.96	-57.31	164.86	67.55	0.69	Magn MWD	Phoenix Directional	-0.58	174.54	3.54	N
2,898	4.20	93.10	2,887.33	-61.99	178.83	73.10	1.48	Magn MWD	Phoenix Directional	-0.76	189.27	-15.17	N
3,076	4.10	91.40	3,064.87	-62.50	191.70	74.41	0.09	Magn MWD	Phoenix Directional	-0.06	201.63	-0.96	N
3,253	5.80	91.10	3,241.20	-62.82	206.97	75.70	0.96	Magn MWD	Phoenix Directional	0.96	216.30	-0.17	N
3,431	6.50	87.60	3,418.18	-62.58	226.03	76.64	0.45	Magn MWD	Phoenix Directional	0.39	234.53	-1.97	N
3,608	6.80	96.70	3,593.99	-63.38	246.45	78.73	0.62	Magn MWD	Phoenix Directional	0.17	254.47	5.14	N



Directional Survey

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unuse d data
3,786	6.60	98.70	3,770.78	-66.15	267.03	82.79	0.17	Magn MWD	Phoenix Directional	-0.11	275.10	1.12	N
3,963	6.70	102.40	3,946.58	-69.91	287.17	87.80	0.25	Magn MWD	Phoenix Directional	0.06	295.55	2.09	N
4,140	5.00	115.80	4,122.66	-75.49	304.20	94.44	1.23	Magn MWD	Phoenix Directional	-0.96	313.42	7.57	N
4,317	4.20	140.50	4,299.11	-83.85	315.26	103.48	1.20	Magn MWD	Phoenix Directional	-0.45	326.22	13.95	N
4,488	1.50	166.70	4,469.89	-90.86	319.76	110.76	1.71	Magn MWD	Phoenix Directional	-1.58	332.42	15.32	N
4,686	1.90	235.10	4,667.82	-95.26	317.67	115.02	0.98	Magn MWD	Phoenix Directional	0.20	331.64	34.55	N
4,864	2.50	278.20	4,845.70	-96.39	311.40	115.75	0.96	Magn MWD	Phoenix Directional	0.34	325.98	24.21	N
5,041	2.70	279.80	5,022.52	-95.13	303.48	114.00	0.12	Magn MWD	Phoenix Directional	0.11	318.04	0.90	N
5,219	1.50	315.80	5,200.40	-92.75	297.72	111.26	0.97	Magn MWD	Phoenix Directional	-0.67	311.83	20.22	N
5,396	1.30	313.20	5,377.35	-89.71	294.64	108.04	0.12	Magn MWD	Phoenix Directional	-0.11	308.00	-1.47	N
5,574	1.30	294.30	5,555.30	-87.50	291.33	105.62	0.24	Magn MWD	Phoenix Directional	0.00	304.19	-10.62	N
5,751	1.50	323.80	5,732.25	-84.80	288.13	102.73	0.42	Magn MWD	Phoenix Directional	0.11	300.35	16.67	N
5,928	1.60	327.80	5,909.19	-80.84	285.45	98.61	0.08	Magn MWD	Phoenix Directional	0.06	296.67	2.26	N
6,105	1.90	332.50	6,086.10	-76.15	282.77	93.75	0.19	Magn MWD	Phoenix Directional	0.17	292.85	2.66	N
6,282	1.20	39.00	6,263.05	-72.11	282.59	89.71	1.02	Magn MWD	Phoenix Directional	-0.40	291.64	-	N
6,460	1.00	35.90	6,441.02	-69.40	284.67	87.14	0.12	Magn MWD	Phoenix Directional	-0.11	293.01	-1.74	N
6,638	0.70	40.90	6,619.00	-67.32	286.29	85.16	0.17	Magn MWD	Phoenix Directional	-0.17	294.10	2.81	N
6,815	0.30	56.30	6,795.99	-66.24	287.39	84.16	0.24	Magn MWD	Phoenix Directional	-0.23	294.92	8.70	N
6,992	0.50	50.30	6,972.99	-65.49	288.37	83.47	0.12	Magn MWD	Phoenix Directional	0.11	295.71	-3.39	N
7,170	0.70	31.30	7,150.98	-64.07	289.53	82.12	0.16	Magn MWD	Phoenix Directional	0.11	296.53	-10.67	N
7,347	1.60	194.90	7,327.96	-65.53	289.45	83.58	1.29	Magn MWD	Phoenix Directional	0.51	296.78	92.43	N
7,524	1.90	169.70	7,504.88	-70.81	289.34	88.84	0.46	Magn MWD	Phoenix Directional	0.17	297.88	-14.24	N
7,702	1.90	178.20	7,682.78	-76.66	289.96	94.72	0.16	Magn MWD	Phoenix Directional	0.00	299.93	4.78	N
7,880	0.40	172.10	7,860.74	-80.23	290.14	98.29	0.84	Magn MWD	Phoenix Directional	-0.84	301.03	-3.43	N
8,057	0.70	174.30	8,037.73	-81.91	290.33	99.98	0.17	Magn MWD	Phoenix Directional	0.17	301.67	1.24	N
8,234	0.90	163.70	8,214.72	-84.32	290.83	102.42	0.14	Magn MWD	Phoenix Directional	0.11	302.81	-5.99	N
8,411	0.90	198.20	8,391.70	-86.98	290.79	105.07	0.30	Magn MWD	Phoenix Directional	0.00	303.52	19.49	N
8,455	1.10	203.40	8,435.69	-87.69	290.51	105.76	0.50	Magn MWD	Baker Hughes	0.45	303.46	11.82	N
8,531	3.81	191.27	8,511.61	-90.84	289.73	108.85	3.61	Magn MWD	Baker Hughes	3.57	303.64	-15.96	N
8,620	13.84	184.40	8,599.45	-104.39	288.33	122.29	11.31	Magn MWD	Baker Hughes	11.27	306.65	-7.72	N



Directional Survey

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unuse d data
8,709	26.37	181.50	8,682.86	-134.88	286.99	152.64	14.12	Magn MWD	Baker Hughes	14.08	317.11	-3.26	N
8,797	35.07	179.95	8,758.44	-179.79	286.50	197.42	9.93	Magn MWD	Baker Hughes	9.89	338.24	-1.76	N
8,886	45.58	177.87	8,826.20	-237.28	287.71	254.88	11.90	Magn MWD	Baker Hughes	11.81	372.93	-2.34	N
8,974	53.92	175.89	8,883.01	-304.28	291.43	321.98	9.63	Magn MWD	Baker Hughes	9.48	421.33	-2.25	N
9,063	62.95	175.35	8,929.55	-379.81	297.23	397.72	10.16	Magn MWD	Baker Hughes	10.15	482.29	-0.61	N
9,151	70.64	176.54	8,964.20	-460.43	302.92	478.54	8.83	Magn MWD	Baker Hughes	8.74	551.14	1.35	N
9,240	79.35	177.85	8,987.22	-546.21	307.11	564.41	9.89	Magn MWD	Baker Hughes	9.79	626.62	1.47	N
9,329	87.04	180.42	8,997.76	-634.49	308.42	652.61	9.10	Magn MWD	Baker Hughes	8.64	705.48	2.89	N
9,418	89.01	180.37	9,000.83	-723.44	307.81	741.34	2.21	Magn MWD	Baker Hughes	2.21	786.20	-0.06	N
9,506	89.08	181.07	9,002.30	-811.42	306.71	829.07	0.80	Magn MWD	Baker Hughes	0.08	867.45	0.80	N
9,595	90.40	181.60	9,002.70	-900.39	304.63	917.74	1.60	Magn MWD	Baker Hughes	1.48	950.53	0.60	N
9,684	90.31	182.05	9,002.15	-989.34	301.80	1,006.34	0.52	Magn MWD	Baker Hughes	-0.10	1,034.35	0.51	N
9,773	90.31	182.38	9,001.67	-1,078.27	298.36	1,094.88	0.37	Magn MWD	Baker Hughes	0.00	1,118.79	0.37	N
9,861	90.22	182.03	9,001.26	-1,166.21	294.97	1,182.43	0.41	Magn MWD	Baker Hughes	-0.10	1,202.93	-0.40	N
9,950	90.28	182.52	9,000.87	-1,255.14	291.44	1,270.96	0.55	Magn MWD	Baker Hughes	0.07	1,288.53	0.55	N
10,038	90.09	182.42	9,000.59	-1,343.05	287.65	1,358.46	0.24	Magn MWD	Baker Hughes	-0.22	1,373.51	-0.11	N
10,126	90.18	181.93	9,000.38	-1,430.99	284.31	1,446.02	0.57	Magn MWD	Baker Hughes	0.10	1,458.96	-0.56	N
10,214	90.25	178.96	9,000.05	-1,518.98	283.62	1,533.79	3.38	Magn MWD	Baker Hughes	0.08	1,545.23	-3.38	N
10,303	90.09	177.95	8,999.79	-1,607.94	286.02	1,622.73	1.15	Magn MWD	Baker Hughes	-0.18	1,633.18	-1.13	N
10,392	90.00	177.55	8,999.72	-1,696.87	289.52	1,711.70	0.46	Magn MWD	Baker Hughes	-0.10	1,721.39	-0.45	N
10,480	90.15	178.31	8,999.60	-1,784.82	292.70	1,799.67	0.88	Magn MWD	Baker Hughes	0.17	1,808.66	0.86	N
10,569	89.94	178.35	8,999.53	-1,873.78	295.29	1,888.62	0.24	Magn MWD	Baker Hughes	-0.24	1,896.90	0.04	N
10,657	90.00	178.59	8,999.58	-1,961.75	297.64	1,976.56	0.28	Magn MWD	Baker Hughes	0.07	1,984.20	0.27	N
10,746	89.85	178.99	8,999.69	-2,050.73	299.52	2,065.49	0.48	Magn MWD	Baker Hughes	-0.17	2,072.48	0.45	N
10,835	90.03	179.60	8,999.79	-2,139.72	300.61	2,154.37	0.71	Magn MWD	Baker Hughes	0.20	2,160.73	0.69	N
10,923	89.91	179.90	8,999.83	-2,227.72	301.00	2,242.22	0.37	Magn MWD	Baker Hughes	-0.14	2,247.96	0.34	N
11,012	90.15	179.54	8,999.79	-2,316.72	301.43	2,331.07	0.49	Magn MWD	Baker Hughes	0.27	2,336.24	-0.40	N
11,100	89.88	180.01	8,999.76	-2,404.72	301.78	2,418.92	0.62	Magn MWD	Baker Hughes	-0.31	2,423.58	0.53	N
11,189	89.91	180.22	8,999.93	-2,493.71	301.60	2,507.73	0.24	Magn MWD	Baker Hughes	0.03	2,511.89	0.24	N
11,277	90.28	178.55	8,999.78	-2,581.71	302.54	2,595.61	1.94	Magn MWD	Baker Hughes	0.42	2,599.37	-1.90	N



Directional Survey

Well Name SALADO DRAW WE 23 FED P5 002H		Lease	Field Name JENNINGS	Business Unit Mid-Continent	
Ground Elevation (ft) 3,156.00	Original RKB (ft) 3,188.60	Current RKB Elevation 3,188.60, 6/2/2016		Mud Line Elevation (ft)	Water Depth (ft)

Survey Data

MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Method	Survey Company	Build (°/100ft)	Depart (ft)	Turn (°/100ft)	Unuse d data
11,366	89.94	178.09	8,999.61	-2,670.67	305.15	2,684.56	0.64	Magn MWD	Baker Hughes	-0.38	2,688. 04	-0.52	N
11,455	90.00	177.20	8,999.66	-2,759.59	308.81	2,773.54	1.00	Magn MWD	Baker Hughes	0.07	2,776. 82	-1.00	N
11,543	90.00	178.40	8,999.66	-2,847.53	312.19	2,861.51	1.36	Magn MWD	Baker Hughes	0.00	2,864. 59	1.36	N
11,632	90.10	181.50	8,999.58	-2,936.51	312.27	2,950.33	3.48	Magn MWD	Baker Hughes	0.11	2,953. 07	3.48	N
11,721	89.90	181.30	8,999.58	-3,025.49	310.09	3,038.99	0.32	Magn MWD	Baker Hughes	-0.22	3,041. 34	-0.22	N
11,809	89.90	180.90	8,999.73	-3,113.47	308.40	3,126.69	0.45	Magn MWD	Baker Hughes	0.00	3,128. 71	-0.45	N
11,898	89.80	181.70	8,999.96	-3,202.45	306.38	3,215.37	0.91	Magn MWD	Baker Hughes	-0.11	3,217. 07	0.90	N
11,987	89.80	182.70	9,000.28	-3,291.38	302.97	3,303.91	1.12	Magn MWD	Baker Hughes	0.00	3,305. 29	1.12	N
12,075	89.76	180.75	9,000.61	-3,379.34	300.32	3,391.52	2.22	Magn MWD	Baker Hughes	-0.05	3,392. 65	-2.22	N
12,164	89.85	179.17	9,000.92	-3,468.33	300.38	3,480.35	1.78	Magn MWD	Baker Hughes	0.10	3,481. 31	-1.78	N
12,253	89.82	179.51	9,001.17	-3,557.33	301.40	3,569.23	0.38	Magn MWD	Baker Hughes	-0.03	3,570. 07	0.38	N
12,341	89.88	176.10	9,001.40	-3,645.25	304.77	3,657.19	3.88	Magn MWD	Baker Hughes	0.07	3,657. 97	-3.88	N
12,430	89.88	174.77	9,001.59	-3,733.96	311.86	3,746.18	1.49	Magn MWD	Baker Hughes	0.00	3,746. 96	-1.49	N
12,519	89.82	176.85	9,001.82	-3,822.72	318.36	3,835.17	2.34	Magn MWD	Baker Hughes	-0.07	3,835. 95	2.34	N
12,608	89.78	182.78	9,002.13	-3,911.68	318.65	3,923.97	6.66	Magn MWD	Baker Hughes	-0.04	3,924. 64	6.66	N
12,697	89.72	154.02	9,002.53	-3,997.95	336.36	4,011.18	32.31	Magn MWD	Baker Hughes	-0.07	4,012. 07	-32.31	N
12,785	90.00	182.71	9,002.75	-4,083.24	353.92	4,097.41	32.60	Magn MWD	Baker Hughes	0.32	4,098. 55	32.60	N
12,874	90.18	184.16	9,002.61	-4,172.08	348.59	4,185.73	1.64	Magn MWD	Baker Hughes	0.20	4,186. 62	1.63	N
12,962	90.31	182.17	9,002.23	-4,259.94	343.73	4,273.12	2.27	Magn MWD	Baker Hughes	0.15	4,273. 78	-2.26	N
13,051	90.10	179.30	9,001.92	-4,348.92	342.59	4,361.85	3.23	Magn MWD	Baker Hughes	-0.24	4,362. 40	-3.22	N
13,139	90.30	178.90	9,001.61	-4,436.91	343.97	4,449.75	0.51	Magn MWD	Baker Hughes	0.23	4,450. 22	-0.45	N
13,228	90.30	178.70	9,001.14	-4,525.89	345.83	4,538.67	0.22	Magn MWD	Baker Hughes	0.00	4,539. 08	-0.22	N
13,317	90.10	176.60	9,000.83	-4,614.81	349.48	4,627.65	2.37	Magn MWD	Baker Hughes	-0.22	4,628. 02	-2.36	N
13,405	90.10	175.50	9,000.68	-4,702.60	355.54	4,715.64	1.25	Magn MWD	Baker Hughes	0.00	4,716. 02	-1.25	N
13,494	90.20	177.40	9,000.44	-4,791.42	361.05	4,804.64	2.14	Magn MWD	Baker Hughes	0.11	4,805. 01	2.13	N
13,582	90.20	179.40	9,000.14	-4,879.38	363.51	4,892.58	2.27	Magn MWD	Baker Hughes	0.00	4,892. 91	2.27	N
13,671	90.10	176.70	8,999.90	-4,968.32	366.54	4,981.54	3.04	Magn MWD	Baker Hughes	-0.11	4,981. 83	-3.03	N
13,760	90.40	176.43	8,999.52	-5,057.16	371.87	5,070.53	0.45	Magn MWD	Baker Hughes	0.34	5,070. 82	-0.30	N
13,866	90.06	181.42	8,999.09	-5,163.11	373.86	5,176.40	4.72	Magn MWD	Baker Hughes	-0.32	5,176. 63	4.71	N
13,891	90.06	181.42	8,999.06	-5,188.10	373.24	5,201.30	0.00	Magn MWD	Baker Hughes	0.00	5,201. 51	0.00	N