

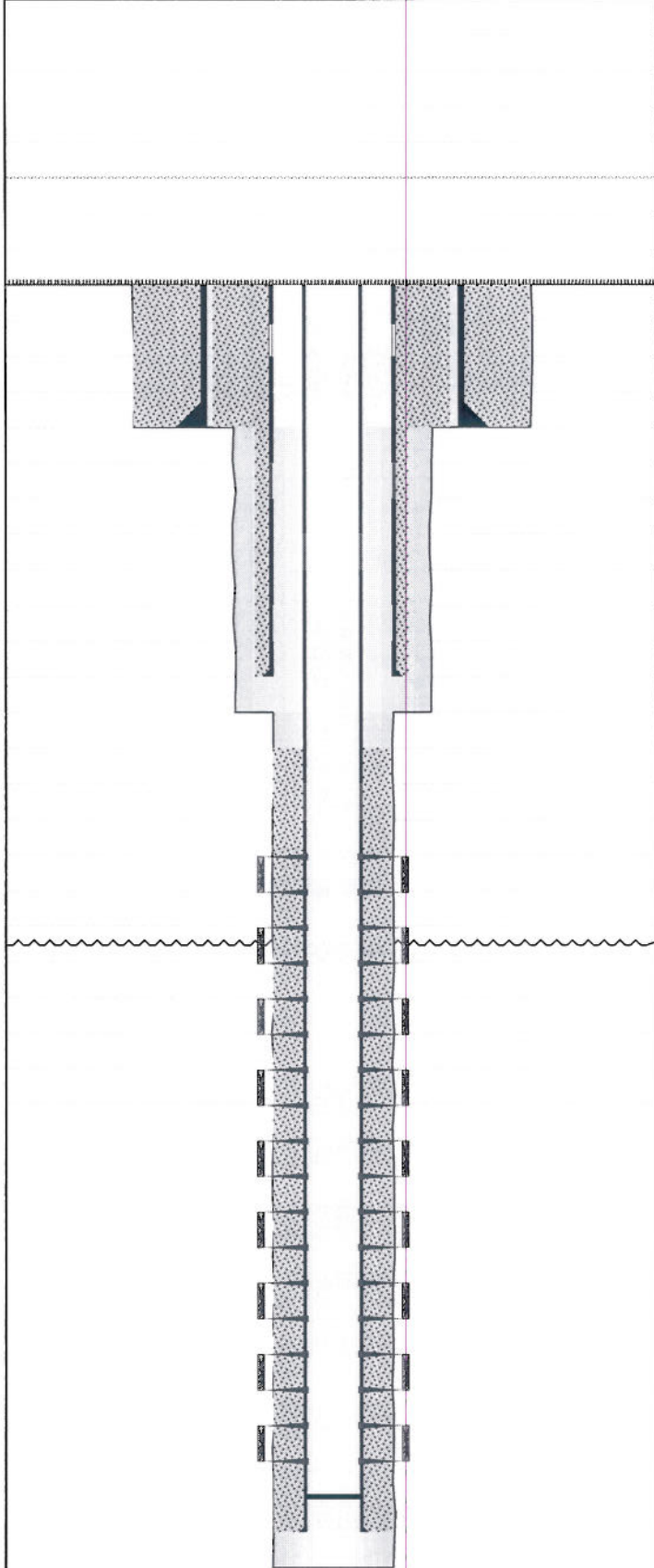
# Final Well Report Detailed (graphic)

Well Name: SG 8509B-21 N22 496

API #	Well Type	Business Unit	SBU	Area	Pad	State	County/Parish
05045210320000	Gas	Southern Rockies	North Piceance	Story Gulch	N22 496	CO	GARFIELD

Directional - Original Hole - Initial Migration, 04/30/2013 9:27:17 AM

Vertical schematic (actual)



## Well Header Setup

Well Name		API #	
SG 8509B-21 N22 496		05045210320000	
Original KB Elevation (ft)	Ground Elevation (ft)	Spud Date	Final Rig Relea...
7,607.00	7,585.00	02/26/2012	03/21/2012
Surface Legal Location		Latitude (decimal) (°)	Longitude (decimal) (°)
		39.68396700	-108.15714700

## Wellbore Sections Setup

Wellbore Type		Kick Off Depth (ftKB)	VS Dir (°)	
Original Hole - Initial Migration			290.05	
Section Des	Hole Size (in)		Act Top (ftKB)	Act Btm (ftKB)
Conductor	30		22.0	120.0
Surface	14 3/4		120.0	2,137.0
Production	8 3/4		2,137.0	11,966.0

## Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
07/25/2012	11,922.0		Wellcore PBTD (TVD): 11037.0000167762

## Casing Data

### Conductor

Casing Description			Run Date		Set Depth (ft/KB)
Conductor			01/08/2012		120.0
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)
Casing Joints	20		52.78	A53B	120.00

### Surface

Casing Description			Run Date	Set Depth (ft)(KB)	
Surface			02/28/2012	2,117.0	
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)
Float Shoe	9 5/8			J-55	1.50
Casing Joints	9 5/8	8.921	36.00	K-55	42.70
Float Collar	9 5/8			J-55	1.50
Casing Joints	9 5/8	8.921	36.00	J-55	44.00
Casing Joints	9 5/8	8.921	36.00	K-55	84.46
Collar	9 5/8				1.50
Casing Joints	9 5/8	8.921	36.00	K-55	1,913.24
Casing Joints	9 5/8				4.80
Casing Joints	9 5/8	8.921	36.00	J-55	28.00

### Production

Casing Description			Run Date	Set Depth (ftKB)	
Production			03/20/2012	11,946.0	
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)
Float Shoe	4 1/2			P-110	1.50
Shoe	4 1/2	4.000	11.60	P-110	20.23
Float Collar	4 1/2			P-110	1.50
Casing Joints	4 1/2	4.000	11.60	P-110	1,454.16
Marker Joint	4 1/2	4.000	11.60	P-110	20.73
Casing Joints	4 1/2	4.000	11.60	P-110	3,004.03
Marker Joint	4 1/2	4.000	11.60	P-110	20.14
Casing Joints	4 1/2	4.000	11.60	P-110	7,427.71

## Cement Data

### Conductor, 120.0ftKB Proposed? No

Description Conductor Cement		String Conductor, 120.0ftKB Proposed? No	Wellbore Original Hole - Initial Migration	Type Casing	
Stg # 1	Description Conductor		Top (ftKB) 22.0	Btm (ftKB) 120.0	Full Return? Yes
Sequence		Fluid Des	Amount (sacks)	Class	
Lead		16yd. Redi Mix	133		

### Surface, 2,117.0ftKB Proposed? No

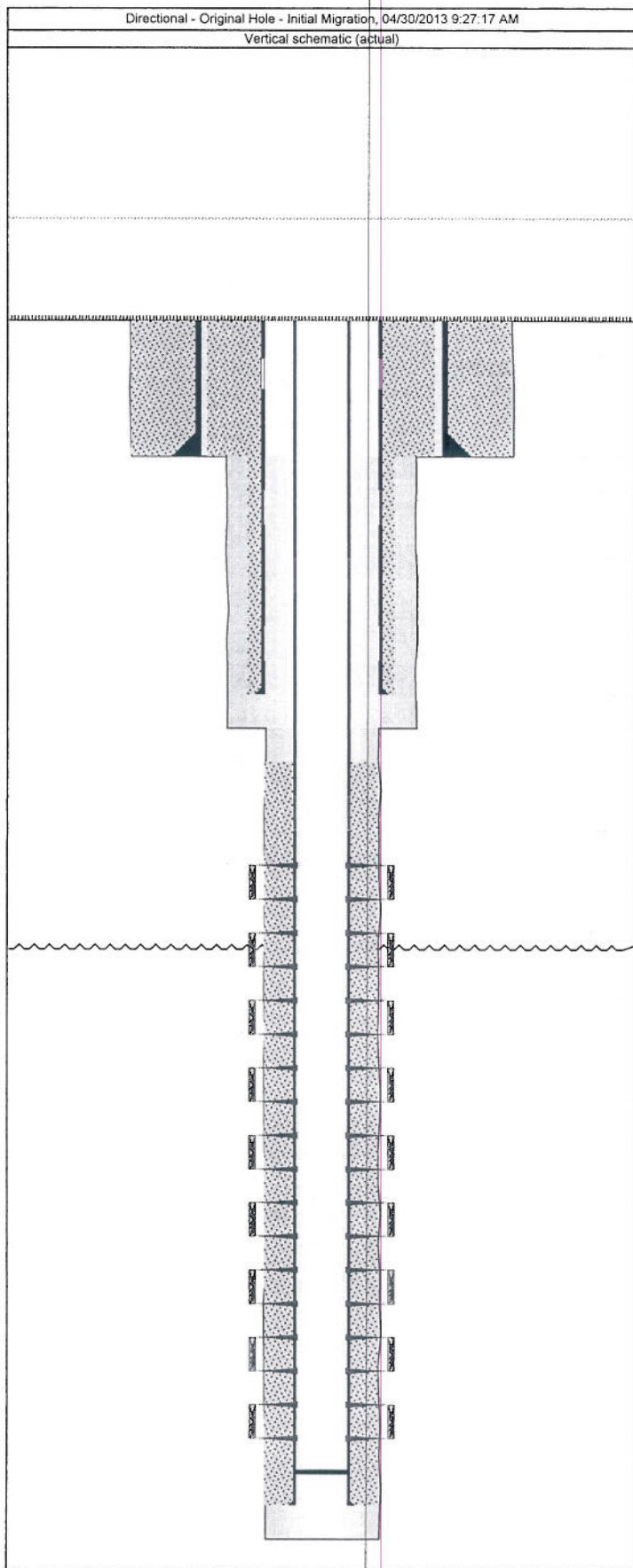
Description	String	Wellbore	Type
Surface Casing Cement	Surface, 2,117.0ftKB Proposed? No	Original Hole - Initial Migration	Casing



# Final Well Report Detailed (graphic)

Well Name: SG 8509B-21 N22 496

API # 05045210320000	Well Type Gas	Business Unit Southern Rockies	SBU North Piceance	Area Story Gulch	Pad N22 496	State CO	County/Parish GARFIELD
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Stg # 1	Description Surface	Top (ftKB) 22.0	Btm (ftKB) 2,117.0	Full Return?		
Sequence		Fluid Des	Amount (sacks)	Class		
Lead		11# LiteFIL	471			
Tail		12.5# LiteFIL	246			
Production, 11,946.0ftKB Proposed? No						
Description Production Casing Cement		String Production, 11,946.0ftKB Proposed? No	Wellbore Original Hole - Initial Migration	Type Casing		
Stg # 1	Description Production	Top (ftKB) 4,454.0	Btm (ftKB) 11,946.0	Full Return?		
Sequence		Fluid Des	Amount (sacks)	Class		
Lead		12ppg TXI LS	569			
Fill		11ppg TXI	959			
Tail		13ppg Rockies Correct GMS Enc	480			
Tubing Data						
Tubing Description		Tubing Set Date	Set Depth (ftKB)			
Item Des	OD (in)	ID (in)	Len (ft)			
Rod Data						
Rod Description		Run Date	Set Depth (ftKB)			
Item Des	OD (in)	Len (ft)				
Zones						
Zone Name Williams Fork		Wellbore Original Hole - Initial Migration	Top Depth (ftKB) 7,993.0	Btm (ftKB) 11,838.0		
Cur Stat Date 04/11/2013	Current Status Producing	Formation(s) Williams Fork				
Zone Name Rollins		Wellbore Original Hole - Initial Migration	Top Depth (ftKB) 11,839.0	Btm (ftKB) 11,966.0		
Cur Stat Date	Current Status	Formation(s) Rollins				
Perforation Data						
Stage # 9	Type Perforated	Top Depth (ftKB) 8,012.0	Bottom Depth (ftKB) 8,298.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 8	Type Perforated	Top Depth (ftKB) 8,341.0	Bottom Depth (ftKB) 8,647.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 7	Type Perforated	Top Depth (ftKB) 8,690.0	Bottom Depth (ftKB) 8,988.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 6	Type Perforated	Top Depth (ftKB) 9,028.0	Bottom Depth (ftKB) 9,422.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 5	Type Perforated	Top Depth (ftKB) 9,514.0	Bottom Depth (ftKB) 9,885.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 4	Type Perforated	Top Depth (ftKB) 9,917.0	Bottom Depth (ftKB) 10,234.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 3	Type Perforated	Top Depth (ftKB) 10,256.0	Bottom Depth (ftKB) 10,593.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 2	Type Perforated	Top Depth (ftKB) 10,673.0	Bottom Depth (ftKB) 11,042.0	Zone Williams Fork, Original Hole - Initial Migration		
Stage # 1	Type Perforated	Top Depth (ftKB) 11,209.0	Bottom Depth (ftKB) 11,635.0	Zone Williams Fork, Original Hole - Initial Migration		
Other In Hole						
OD (in)	Des	Top (ftKB)	Btm (ftKB)	ID (in)	Make	Model