NexTier Job Summary

Ticket Number	Ticket Date
TN# BCO-2108-0017	8/9/2021

COUNTY	COMPANY	API Number
WELD (CO)	BONANZA CREEK ENERGY	05-123-50450-00
WELL NAME	**RIG**	**JOB TYPE**
ANTELOPE C12-W42-33HNB	Ensign 122	CM-SURFACE CASING
SURFACE WELL LOCATION	**CJES Field Supervisor**	**CUSTOMER REP**
40.35602 -104.33701	ANTHONY STAPLES	Tim Joel

EMPLOYEES

JAMES MCFARLAND		
JAMES BELL-VERHEY		

WELL PROFILE

Max Treating Pressure (psi):		Bottom Hole Static Temperature (°F):	
Bottom Hole Circulating Temperature (°F):		Well Type:	

Open Hole

	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
1	13.5	0	1634	0	1634
2					

Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Surface	9.625	36		0	1623.43	0	1623.43

CEMENT DATA

Stage 1: Type: **LEAD**

From Depth (ft): 0 To Depth (ft): 968

Volume (sacks): 330 Volume (bbls): 145 CF 368.7

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.
100% NCM-922 + 2% NAC-102 + 2% NAC-101 + 2% NAC-110 + .4% NFP-701 + .25 PPS NLM-600	12	2.46	14.48

Stage 2: Type: **TAIL**

From Depth (ft): 968 To Depth (ft): 1623

Volume (sacks): 230 Volume (bbls): 60 CF 241.8

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.
100% NCM-922 + 1% NAC-110 + .4% NFP-701 + .25 PPS NLM-600	14.2	1.47	7.31

Stage 3: Type: **Top Off**

From Depth (ft): To Depth (ft):

Volume (sacks): Volume (bbls):

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.

Stage 4: Type:

From Depth (ft): To Depth (ft):

Volume (sacks): Volume (bbls):

Cement & Additives:	Density (ppg)	Yield (ft^3/sk)	Water Req.

SUMMARY

				Stage 1	Stage 2
Preflushes:	20	bbls of	Dye	Calculated Displacement (bbl):	122	
		bbls of		Actual Displacement (bbl):	122	
		bbls of				

TotalPreflush/Spacer Volume (bbl):	20	Plug Bump (Y/N):	Y	Bump Pressure (psi):	903
Total Slurry Volume (bbl):	205	Lost Returns (Y/N):	N	(if Y, when)	
Total Fluid Pumped	347				
Returns to Surface:	44	bbls			

Job Notes (fluids pumped / procedures / tools / etc.):

Pumped 20 bbls DYE Spacer, followed by 330 sks (145) bbls of 12# Lead Cement, followed by 230 sks (60) bbls of 14.2# Tail Cement and Displaced with 122 bbls. Top of Tail is @ 968 ft and got 44 bbls of Cement to Surface.

Customer Representative Signature:

Thank You For Using
NexTier Completion Solutions

Cement Job Log

NexTier Completion Solutions
3990 Rogerdale Rd., Houston, TX 77042
(713)325-6000

Customer:	BONANZA CREEK ENERGY	Date:	9-Aug-21	Serv. Supervisor:	ANTHONY STAPLES		
Cust. Rep.:	Tim Joel	Ticket #:	BCO-2108-0017	Serv. Center	Brighton - 3021		
Well Name:	ANTELOPE C12-W42-33HNB	API Well #:	05-123-50450-00	County:	WELD (CO)	State:	COLORADO
Well Type:	Oil	Rig:	Ensign 122	Type of Job:	CM-SURFACE CASING		

Materials Furnished by NexTier

Plugs	Casing Hardware	Physical Slurry Properties							
		Sacks of Cement	Fluid Density (lb/gal)	Excess	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbls)	Fluid Volume (cuft)	Mix Water (bbls)
0				0%	-	-		-	
Spacer - 20 bbl Fresh Water				0%	-	-		-	
Lead	100 % NCM-922 +2.0 % NAC-102+2.0 % NAC-101+2.0 % NAC-110+0.4 % NFP-701+0.25 PPS NLM-600	330	12	50%	2.46	14.48	144.72	812.58	114
Tail	100 % NCM-922 +1.0 % NAC-110+0.4 % NFP-701+0.25 PPS NLM-600	230	14.2	30%	1.47	7.31	60.37	339.00	40
Displacement - To be Calculated on Location				0%	-	-	120.45	-	
				0%	-	-		-	
				0%	-	-		-	
				0%	-	-		-	
				0%	-	-		-	

Displacement Chemicals:

OPEN HOLE DATA

13.5 in. O.H. 0 to 1,600 ft

Ambient Tmp.	Bulk Tmp.	Slurry 1 Tmp.	Slurry 2 Tmp.	Slurry 3 Tmp.	Slurry 4 Tmp.
70.0 °F		78.0 °F	79.0 °F		

TUBULAR DATA

9.625 in. 36#, (0 to 1,600 ft)

SIZE WEIGHT	THRD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
9.625		1623.43		8.921	3520	2020

PREVIOUS CASING DATA

PERFORATED INTERVAL DATA

TOP	BTM	SPF	SIZE

CASING EQUIPMENT DEPTHS

SHOE	FLOAT	STAGE	ACP
41.5	1581		

WELL FLUID

TYPE	DENSITY
H2O	8.4 ppg

DISPLACEMENT FLUID

VOLUME	TYPE	DENSITY
122 bbl	H2O	8.3 ppg

DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)	Mix H2O Chlorides (ppm)	Mix H2O pH	Mix H2O Temp	WATER ON LOC (bbl)
372		1000	30	7	67.0 °F	500

Bumped Plug	Final Differential (psi)	Floats Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Top of Cement (ft)	Full Circ. During Job (Y/N)	Max Pump Pressure (psi)	Casing Rotation	Additional Hrs Charged (hrs)	Casing Reciprocation	Rathole Length (ft)
Yes	420.00	Y	-	44.00	-	Yes	903.00	No		No	

Comments/Additional Details:

ANTHONY STAPLES — Service Supervisor

9-Aug-21 — Date

Cement Job Log

NEXTIER

Customer:	BONANZA CREEK ENERGY			**Date:**	9-Aug-21		**Serv. Supervisor:**	ANTHONY STAPLES	
Cust. Rep.:	Tim Joel			**Ticket #:**	BCO-2108-0017		**Serv. Center:**	Brighton - 3021	
Well Name:	ANTELOPE C12-W42-33HN	**RTS Date:**	9-Aug-21	**API Well #:**	**05-123-50450-00**		**County:**	**WELD (CO)**	**State:** COLORA
Well Type:	Oil	**RTS Time:**	8:45 AM	**Rig:**	**Ensign 122**		**Type of Job:**	**CM-SURFACE CASING**	

	Date	Time		Date	Time		Date	Time
Left Yard:	09-Aug-21	6:45 AM	**Left Loc.:**	09-Aug-21	**12:30 PM**	**Start Pump:**	09-Aug-21	9:53 AM
Arrived Loc.:	09-Aug-21	**8:45 AM**	**Returned Yd.:**	09-Aug-21	2:30 PM	**End Pump:**	09-Aug-21	11:17 AM

TIME Note: Red boxes indicate bad values!	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Num. Stage #	**Stage Details**
6:45 AM								Left Yard or Current Location
8:45 AM							1	ARRIVE ON LOCATION
8:45 AM							1	SPOT EQUIPMENT
8:55 AM							1	PRE-RIG UP SAFETY MEETING
9:00 AM							1	RIG UP
9:36 AM							1	PRE-JOB SAFETY MEETING
9:53 AM	3	148			2.0 bbl	2.0 bbl	1	LOAD LINES
9:54 AM		2795					1	PRESSURE TEST
9:57 AM	5	224			18.0 bbl	20.0 bbl	1	DYE SPACER
10:00 AM	6	280			145.0 bbl	165.0 bbl	1	BATCH, WEIGH, PUMP 12# LEAD CEMENT
10:24 AM	4.8	312			60.0 bbl	225.0 bbl	1	14.2# TAIL CEMENT.. TOP OF TAIL @ 968 FT
10:35 AM							1	SHUTDOWN / DROP PLUG
10:40 AM	5.5	182			55.0 bbl	280.0 bbl	1	DISPLACEMENT
10:50 AM	5.5	434			23.0 bbl	303.0 bbl	1	DYE TO SURFACE
10:55 AM	5.5	577			34.0 bbl	337.0 bbl	1	CEMENT TO SURFACE
10:58 AM	2.0	555			10.0 bbl	347.0 bbl	1	DROP RATE
11:14 AM		903					1	BUMP PLUG @ 122 BBLS AWAY… 44 BBLS CEMENT TO SURFACE
11:17 AM							1	CHECK FLOATS… 1 BBL BACK
11:23 AM							1	RIG OUT SAFETY MEETING
11:30 AM							1	RIG OUT
12:30 PM							1	LEAVE LOCATION

Field Cementing Water Analysis

Company: Bonanza Creek

Test Date: 8/9/2021

Well: Antelope C12-W42-33HNB

Ticket Number: BCO-2108-0017

Ion	Sample Volume	Titer	Factor	Concentration	Units	Limit
pH				7		6 - 8
Chlorides				30	mg/l	<500
Alkalinity				40	mg/l $CaCO^3$	<600
Mix Water Temp				70	°F	50-80°F

Water Analysis Limits		
	Limits	**Potential Impact of Excess**
pH	6 - 8	Accelerate or Retard Set Time, Short & Long Term Stability Issues
Chlorides	<500	Accelerate Set Time, Higher Mixing Visc, Interfere with fluid loss chemical
Alkalinity	<600	Accelerate or Retard Set Time,Lower Compressive Strength,Higher Visc
Mix Water Temp	50-80°F	Blend will not perform as designed

NextTier Supervisor Signature: _____

Company Supervisor Signature: _____

Client	Bonanza Creek	Client Rep	Tim	Supervisor	Anthony Staples
Ticket No.	21080017	Well Name	Antelope C12-W42-33HNB	Unit No.	445084
Location		Job Type	Surface Casing	Service District	Brighton
Comments				Job Date	08/09/2021