



Bison Oil Well Cementing Tail & Lead

Customer: Crestone Peak Resources
Well Name: DAVIS 1G-9H-G266

Date: 5/28/2018
Invoice # 300142
API# 05-123-46507
Foreman: JASON KELEHER

County: Weld
State: Colorado
Sec: 9
Twp: 2N
Range: 66W

Consultant: RYAN
Rig Name & Number: Ensign 153
Distance To Location: 26
Units On Location: 3
Time Requested: 2030
Time Arrived On Location: 1830
Time Left Location: 1230

WELL DATA

Casing Size (in) : 9.625
Casing Weight (lb) : 40
Casing Depth (ft.) : 2,188
Total Depth (ft) : 2203
Open Hole Diameter (in) : 13.50
Conductor Length (ft) : 98
Conductor ID : 15.25
Shoe Joint Length (ft) : 86
Landing Joint (ft) : 6

Sacks of Tail Requested 190
HOC Tail (ft):

One or the other, cannot have quantity in both

Max Rate: 8
Max Pressure: 2000

Cement Data

Lead N-Gel-12
Cement Name:
Cement Density (lb/gal) : 13.5
Cement Yield (cuft) : 1.7
Gallons Per Sack 9.00
% Excess 20%

Tail Type III
Cement Name:
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess:

Fluid Ahead (bbls) 60.0
H2O Wash Up (bbls) 10.0

Spacer Ahead Makeup
60 BBL WATER DYE IN 2ND 10

Casing ID

8.835

Casing Grade

J-55 only used

Lead Calculated Results

HOC of Lead 1769.72 ft
Casing Depth - HOC Tail
Volume of Lead Cement 980.37 cuft
HOC of Lead X Open Hole Ann
Volume of Conductor 74.67 cuft
(Conductor ID Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
Total Volume of Lead Cement 1055.13 cuft
(cuft of Lead Cement) + (Cuft of Conductor)
bbls of Lead Cement 188.00 bbls
(Total cuft of Lead Cement) X (.1781) X (1+Lead Excess)
Sacks of Lead Cement 621.00 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
bbls of Lead Mix Water 133.07 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42
Displacement 159.70 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth) + (Landing Joint) - (Shoe Length)
Total Water Needed: 390.00 bbls

Tail Calculated Results

Tail Cement Volume In Ann 204.32 cuft
(HOC Tail) X (OH Ann)
Total Volume of Tail Cement 240.92 Cuft
(HOC Tail X OH Ann) - (Shoe Length X Shoe Joint Ann)
bbls of Tail Cement 42.98 bbls
(HOC of Tail) X (OH Ann) + (Cement Yield) X (Shoe Joint Ann) X (.1781) X (% Excess)
HOC Tail 418.28 ft
(Tail Cement Volume) ÷ (OH Ann)
Sacks of Tail Cement 190.00 sk
(Total Volume of Tail Cement) ÷ (Cement Yield)
bbls of Tail Mix Water 26.64 bbls
(Sacks of Tail Cement X Gallons Per Sack) ÷ 42
Pressure of cement in annulus
Hydrostatic Pressure 595.00 PSI
Collapse PSI: 2570.00 psi
Burst PSI: 3950.00 psi

X

Authorization To Proceed



Bison Oil Well Cementing
Two Cement Surface Pipe

Customer Crestone Peak Resources
Well Name DAVIS 1G-9H-G266

Date 5/22/2018
INVOICE # 300142
LOCATION Weld
FOREMAN JASON KELEHER

DESCRIPTION OF JOB EVENTS

Amount Pumped		Time/Date	Event	Description	Rate	BBLs	Pressure
Lead mixed bbls	133	1830	ARRIVE ON LOCATION	ASSESS LOCATION			
Lead % Excess	20%	2000	MIRU	SPOT EQUIPMENT AND RIG UP			
Lead Sacks	621	2105	PRE JOB SAFETY MEETING				
		2130	PRESSURE TEST	PRESSURE TEST TO 1500 PSI			
		2133	FRESH WATER SPACER	60 BBL WATER DYE IN 2ND 10	5.5	60	140
Tail mixed bbls	26.6	2148	LEAD CEMENT	621 SKS MIXED 13.5 PPG	6	188	180
Tail % Excess	0%	2225	TAIL CEMENT	190 SKS MIXED AT 15.2 PPG	5.5	42.9	210
Tail Sacks	190	2233	SHUT DOWN				
		2236	DROP PLUG				
Total Sacks	811	2236	DISPLACEMENT	SLOW RATE TO 2BPM LAST 10BBL	3	159.7	690
Water Temp	60	2332	BUMP PLUG				1250
bbl Returns	17	2338	CHECK FLOATS	FLOATS HELD 1 BBL BACK TO TRUCK			
		2345	RIG DOWN				
Notes:		1230	LEAVE LOCATION				
PUMP WENT DOWN							
AT 110 BBL AWAY OF							
DISPLACEMENT.							
SWITCHED OVER TO RIG							
TO BUMP PLUG.							

X
CUSTOMER SIGNATURE

X
Title

X
Date