

## Well Summary Report

### State-Krause 1 12/11/2017 06:00 - 12/12/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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#### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	LOCL	Lock Wellhead & Secure	
10:00	1.00	11:00	GOP	General Operations	Dig hole, locate CSG top, verify 8 5/8"
11:00	1.00	12:00	IWHD	Install Wellhead	Cut CSG Top, Weld on 8 5/8" X 11" 3K wellhead, install cellar ring, backfill

### State-Krause 1 12/13/2017 06:00 - 12/14/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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#### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	LOCL	Lock Wellhead & Secure	
10:00	5.00	15:00	GOP	General Operations	Smooth out sand surface around WH, haul in gravel, blade location, haul gravel and lay down on road to location
15:00	3.00	18:00	SRIG	Rig Up/Down	MIRU Ensign rig #312 and related Equip.  Lay down rig mats, spot tubing trailer, spot basebeam, spot rig, move in rig pump, rig tank, and frac tanks.  SDFN
18:00	1.00	19:00	CTRL	Crew Travel	
19:00	11.00	06:00	LOCL	Lock Wellhead & Secure	

### State-Krause 1 12/14/2017 06:00 - 12/15/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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#### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	
07:00	4.00	11:00	SRIG	Rig Up/Down	Fire up equip, Raise Derrick, NU BOPs, connect pump lines, haul in water, RU power swivel
11:00	2.00	13:00	DTIM	Downtime	went to pick up 1st Drill Collar and blew a hydraulic hose on swivel, repair hose
13:00	1.00	14:00	SRIG	Rig Up/Down	Perform maint. on equipment
14:00	1.00	15:00	CTRL	Crew Travel	
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	

### State-Krause 1 12/15/2017 06:00 - 12/16/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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#### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	
07:00	1.00	08:00	SRIG	Rig Up/Down	Safety meeting, fire up equip, Tally pipe, PU 6 1/8" Tricone bit BHA:  1) X-Over 2) Float Valve 3) Bit Sub 4) 6 1/8" Tri cone bit  3.5" Drill collar to 2 3/8" PH6 XOs 1) 1.12' 2) 0.80' 3) 1.13'  Total Length: 7.85'
08:00	9.00	17:00	DOPG	Drill Out Plugs	PU 1sr drill collar and drill cement @ surface, fought larger pieces of rock in returns, had to clean out return line multiple times.  Continue Drilling pumping 2.5bpm, Drilled 35' of surface plug
17:00	1.00	18:00	SRIG	Rig Up/Down	POOH LD drill collar & bit, winterize equipment, secure WH
18:00	1.00	19:00	CTRL	Crew Travel	
19:00	11.00	06:00	LOCL	Lock Wellhead & Secure	

### State-Krause 1 12/18/2017 06:00 - 12/19/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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## Well Summary Report

Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel		
07:00	0.50	07:30	SRIG	Rig Up/Down	Safety Meeting, Fire up equip.	
07:30	3.00	10:30	RUTB	Run Tubing	PU 6 1/8" Tricone bit BHA, RIH drill cement from 35' -168',	
10:30	1.00	11:30	RUTB	Run Tubing	PU JNT 5 ( 1st 2 3/8" JNT) swap washington rubber & pipe rams to 2 3/8", continue milling to 200' Thru cement plug	
11:30	2.00	13:30	RUTB	Run Tubing	RIH & wash down without swiveling, PU JNT #11 EOT @ 353' noticed returns were coming up outside of 8 5/8" surface casing, filling up cellar, SD Pump and leak stopped, POOH above CSG shoe, monitor for flow, no flow outside of CSG.	
13:30	1.00	14:30	PULT	Pull Tubing	POOH, LD Drill collars and 6 1/8" Tricone bit BHA	
14:30	3.00	17:30	SRIG	Rig Up/Down	MU mule shoe BHA, RIH to 250' stand by for cementers, hold safety meeting with Ranger cementers, spot and RU equip.	
17:30	0.50	18:00	CEMT	Cement Squeeze	Pump 5bbls 15.8# class G cement for balanced plug between 250-180', SI backside valve and displace 17 bbls cement, saw cement in returns by hole outside of surface CSG. Pumped a total of 105 sks, POOH LD 4 JNTS, circulate down TBG to clean up, didn't see any cement in returns, saw no returns outside of surface CSG, POOH remaining 4 JNTS and mule shoe.	
18:00	1.00	19:00	SRIG	Rig Up/Down	Clean up surface lines, RDMO Ranger Cementers, winterize rig Equip, hydrovac FB tank.	
19:00	1.00	20:00	CTRL	Crew Travel		
20:00	10.00	06:00	LOCL	Lock Wellhead & Secure		

### State-Krause 1 12/19/2017 06:00 - 12/20/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel		
07:00	0.50	07:30	SRIG	Rig Up/Down	Safety meeting, fire up equip	
07:30		07:30	PTST	Pressure Test	Set up to test surface CSG, fill wellbore, SI blind rams, hook up to pump down backside, bring pump to 40psi, noticed fluid leaking outside of surface CSG, SD pump, bled off psi	
07:30	1.00	08:30	TRIP	Tripping	TIH w/ mule shoe and 6 JNTS 2 3/8" PH6, tag cement @ 178', pull up and tag hard 3 different times. LD 1 JNT, end of shoe @ 158' establish 1.0bpm down tubing returning up casing to FB tank, walk rate to 2.0bpm, saw psi come up to 20 on CSG, still had returns to FB tank, saw slight fluid increase coming in outside of Surface CSG, SD pump	
08:30	3.00	11:30	GOP	General Operations	Stand by for orders	
11:30	2.50	14:00	RUTB	Run Tubing	POOH mule shoe, MU 6 1/8" Tricone bit and drill collars, RIH to 160' Pumping 2.0bpm, have returns to FB tank, rih and drill cement, very small flow coming up outside surface CSG, Continue to drill/wash down to 353', returns from leak outside of surface CSG increased, SD pump.	
14:00	0.50	14:30	PULT	Pull Tubing	POOH w/ 11 JNTS and tricone bit	
14:30	3.00	17:30	SRIG	Rig Up/Down	RD Rig floor, ND BOPS, chisel out cement around 11' flange neck to make room for 4.5" slip hanger. NU BOPs, RU Rig floor, swap over to 4.5" equip.  Winterize Equip, SDFN	
17:30	1.00	18:30	CTRL	Crew Travel		
18:30	11.50	06:00	LOCL	Lock Wellhead & Secure		

### State-Krause 1 12/20/2017 06:00 - 12/21/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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Time Log						
Start Time	Dur (hr)	End Time	Code	Category	Com	
06:00	1.00	07:00	CTRL	Crew Travel		
07:00	0.75	07:45	SRIG	Rig Up/Down	Safety meeting, fire up equip	
07:45	1.00	08:45	RUTB	Run Tubing	PU 4.5" Float valve & RIH w/ 4.5" P-110, 11.6# CSG, run 7 JNTS EOT @ 320'  Spot BJ cement equip.	
08:45	1.25	10:00	SRIG	Rig Up/Down	ND 11" 3K flange on top of WH, set Cameron slip hanger in place, slack of 4.5" with elvators, tighten 2 lock down pins in hanger, NU 11" 3K flange  Continue to RU cement equipment, RU cement head to 4.5" CSG top  Hold safety meeting with cementers	
10:00	0.75	10:45	CEMT	Surface Casing	Pressure test surface lines to 1500psi, good test, establish circulation, pump 10bbls fresh, followed by 30bbls 12.5#, 2.22 yield, WR 12.59, 76 sks, saw cement to surface after 23bbls, 7 back to surface, drop plug, displace w/ 5bbls fresh, land plug w/ 100psi circ pressure, bumped to 2500psi, float held, .25bbl back to truck.	

## Well Summary Report

Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
10:45	3.25	14:00	SRIG	Rig Up/Down	Clean up lines, RD Cement Equip. RD 4.5" CSG equip, RD floor, loosen bolts on 11" flange to remove for welder, stand by for welder
14:00	0.50	14:30	SRIG	Rig Up/Down	Cut 4" CSG top flush with hanger, NU flange & Bops
14:30	0.75	15:15	RUTB	Run Tubing	PU 3.75" tricone bit @ RIH w/ 3.125" drill collars and 2 3/8" PH6  BHA:  1) 3.75" Tricone bit 2) float sub 3) bit sub  Drill collars to PH6: 1) XO 2) XO  Total length: 3.58'  RIH w/ BHA, 6 drill collars and 3 JNTS 2 3/8" PH6 EOT @ 280'
15:15	0.75	16:00	SRIG	Rig Up/Down	Secure WH, Winterize Equip, SDFN
16:00	1.00	17:00	CTRL	Crew Travel	
17:00	13.00	06:00	LOCL	Lock Wellhead & Secure	

### State-Krause 1 12/21/2017 06:00 - 12/22/2017 06:00

API 05-123-65212	State/Province Colorado	County Weld	Field Name Non-Operated	Well Status	Total Depth (ftKB)	Primary Job Type Abandon Well
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Time Log					
Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	
07:00	1.00	08:00	SRIG	Rig Up/Down	Safety Meeting, Fire up equipment, RU power swivel
08:00	2.00	10:00	RUTB	Run Tubing	Continue RIH w/ 3.75" tricone bit & TBG, Tag cement plug on JNT 12 @ 320' drill plug and float valve, saw good rubber in returns. Continue to work JNT 12 from 320'-382' saw heavy returns of old cement & wood, circulated until returns are clean.
10:00	7.00	17:00	RUTB	Run Tubing	Continue washing to TD  TD @ 2500' w/ JNT 81, circulate hole clean
17:00	2.00	19:00	PULT	Pull Tubing	RD power swivel, LD 1 single JNT, stand back 37 stands in derrick, LD 6 drill collars.
19:00	0.50	19:30	SRIG	Rig Up/Down	OOH w/ 3.75" Tricone bit, Prep for cement in AM, winterize equip. Secure WH, SDFN
19:30	1.00	20:30	CTRL	Crew Travel	
20:30	9.50	06:00	LOCL	Lock Wellhead & Secure	