

**US ROCKIES REGION**  
**Operation Summary Report**

Well: <b>CANNON W15-20</b>		Spud date: 7/21/2008	
Project: COLORADO-WELD-NAD83-UTM13		Site: CANNON W15-20	Rig name no.: BRIGADE 8/8
Event: CONST- CAP WELL WORK		Start date: 2/26/2019	End date:
Active datum: RKB @5,003.99usft (above Mean Sea Level)		UWI: NE/SW/0/2/N/66/W/15/0/0/6/0/S/2,595.00/W/0/0/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
2/13/2019	13:00 - 14:00	1.00	LOCPRP	53	B	P		ANCHORS + STRING FENCE LOCATION FOR UP COMING RIG OPS
2/26/2019	12:00 - 12:15	0.25	WO/REP	48	B	P		RIG-SAFETY MEETING & JSA DISCUSS  REFER TO SAFETY TAB  COMPLETE DAILY INSPECTION
	12:15 - 13:30	1.25	WO/REP	30	G	P		MIRU BRIGADE 8, INSPECT LOCATION IT IS A PAD, SPOT BASE BEAM, PUMP, TANK, & RIG, RU RIG ONTO BASE BEAM, RU PUMP & TANK, CHECK WELL PRESSURE TP-700#, CP-700#, SP-0#
	13:30 - 13:35	0.08	WO/REP	52	I	X		BRIGADE BROUGHT 2 LOADS OF WATER CHECK BRADENHEAD PRESSURE WITH CRYSTAL GAUGE, GAUGE READ 0PSI, TEST PASSED
	13:35 - 15:30	1.92	WO/REP	30	E	P		MIRU RMOR BOP TEST TRAILER BLOW DOWN WELL TO 150PSI THEN CIRCULATE GAS OUT W 150BBLs DOWN CSG CSG UP TBG
	15:30 - 15:40	0.17	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	15:40 - 17:00	1.33	WO/REP	52	F	P		REFER TO SAFETY TAB H-S TESTING,  TEST BLINDS RAMS TO 250# & 5000# - PASSED TEST PIPE RAMS TO 250# & 5000# - PASSED
	17:00 - 17:30	0.50	WO/REP	30	I	P		DRAIN PUMPS AND LINES, WINTERIZE PUMP, BLOW LINES OUT WITH AIR TO PREVENT FROZEN LINES
	17:30 - 18:00	0.50	WO/REP	30	G	P		SIW, COMPLETE POST DAY INSPECTION, SDFN RIG CREW TRAVEL HOME FOR THE DAY
2/27/2019	6:00 - 6:30	0.50	WO/REP	30	G	P		TRAVEL TO LOCATION, FILL OUT JSA & HAVE SAFETY MEETING W/RIG CREW, INSPECT EQUIPMENT PRE JOB CHECK TO ELIMINATE JOB ISSUES, FUNCTION TEST BOP, CHECK WELL PRESSURE TP-20#, CP-50#, SP-0#
	6:30 - 6:55	0.42	WO/REP	48	B	P		RIG JSA & SAFETY MEETING  REFER TO SAFETY TAB  DO DAILY INSPECTION
	6:55 - 7:00	0.08	WO/REP	52	I	P		CHECK BRADENHEAD PRESSURE WITH CRYSTAL GAUGE, GAUGE READ 0PSI, TEST PASSED
	7:00 - 7:10	0.17	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	7:10 - 8:45	1.58	WO/REP	31	I	P		REFER TO SAFETY TAB TRYING TO UNLAND TBG MANDRIL THE MANDRIL WAS STUCK, CALLED JOSH AND HE WANTS US TO JUST KEEP WORKING IT AND TRY TO HEAT IT UP. THE RIG CREW SET THE RIG HEATER HOSE ON THE WH FOR ABOUT AN HOUR AND IT SEEMED TO WORK AND THE TBG MANDRILL CAME FREE.

US ROCKIES REGION  
**Operation Summary Report**

Well: CANNON W15-20		Spud date: 7/21/2008	
Project: COLORADO-WELD-NAD83-UTM13		Site: CANNON W15-20	Rig name no.: BRIGADE 8/8
Event: CONST- CAP WELL WORK		Start date: 2/26/2019	End date:
Active datum: RKB @5,003.99usft (above Mean Sea Level)		UWI: NE/SW/0/2/N/66/W/15/0/0/6/0/S/2,595.00/W/0/0/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	8:45 - 11:00	2.25	WO/REP	31	I	P		TOOH,  STD BACK 232JTS 2.375" TBG LD 8JTS 2.375" TBG LD XN NIPPLE LD NOTCHED COLLAR  <b>MIRU RELIANCE WIRELINE</b>
	11:00 - 11:10	0.17	WO/REP	48	B	P		WIRELINE JSA & SAFETY MEETING  REFER TO SAFETY TAB
	11:10 - 11:45	0.58	WO/REP	34	O	P		PU & RIH TO 7263' W/3.75"GAUGE RING, JUNK BASKET, CCL, & SINKER BAR, POOH LD TOOL
	11:45 - 12:15	0.50	WO/REP	34	I	P		PU & RIH CIBP & SETTING TOOL, <b>SET CIBP @ 7205'</b> , POOH LD TOOL
	12:15 - 13:00	0.75	WO/REP	34	D	P		PU & RIH W/DUMP BAILER, <b>DUMP BAIL 2sx CMT ON CIBP @ 7205'</b> , POOH LD DOWN DUMP BAILER
	13:00 - 14:15	1.25	WO/REP	31	I	P		TIH TO 7178',  232JTS 2.375" TBG XN NIPPLE NOTCHED COLLAR  RDMO RELIANCE WIRELINE
	14:15 - 15:30	1.25	WO/REP	31	H	P		CIRCULATE GAS OUT  2.5BPM @ 800PSI FOR 120BLS
	15:30 - 15:35	0.08	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING  REFER TO SAFETY TAB
	15:35 - 16:00	0.42	WO/REP	52	F	P		<b>PT CSG &amp; CIBP TO 1000# FOR 15MIN</b>  <b>GOOD TEST</b>
	16:00 - 16:15	0.25	WO/REP	52	F	P		PERFORM MIT PRETEST TO 370# FOR 15MIN  GOOD TEST, AFTER PRESSURE LEVELED OUT FROM PUMPING, THE PRESSURE STARTED TO RISE DUE TO DOWN HOLE TEMP.
	16:15 - 17:00	0.75	WO/REP	30	I	P		DRAIN PUMPS AND LINES, WINTERIZE PUMP, BLOW LINES OUT WITH AIR TO PREVENT FROZEN LINES
	17:00 - 17:30	0.50	WO/REP	30	G	P		SIW, COMPLETE POST DAY INSPECTION, SDFN RIG CREW TRAVEL HOME FOR THE DAY
2/28/2019	6:00 - 6:30	0.50	WO/REP	30	G	P		TRAVEL TO LOCATION, FILL OUT JSA & HAVE SAFETY MEETING W/RIG CREW, INSPECT EQUIPMENT PRE JOB CHECK TO ELIMINATE JOB ISSUES, FUNCTION TEST BOP, CHECK WELL PRESSURE TP-20#, CP-50#, SP-0#
	6:30 - 6:55	0.42	WO/REP	48	B	P		RIG JSA & SAFETY MEETING  REFER TO SAFETY TAB
	6:55 - 7:00	0.08	WO/REP	52	I	P		DO DAILY INSPECTION CHECK BRADENHEAD PRESSURE WITH CRYSTAL GAUGE, GAUGE READ 0PSI, TEST PASSED

US ROCKIES REGION  
Operation Summary Report

Well: CANNON W15-20

Spud date: 7/21/2008

Project: COLORADO-WELD-NAD83-UTM13

Site: CANNON W15-20

Rig name no.: BRIGADE 8/8

Event: CONST- CAP WELL WORK

Start date: 2/26/2019

End date:

Active datum: RKB @5,003.99usft (above Mean Sea Level)

UWI: NE/SW/0/2/N/66/W/15/0/0/6/0/S/2,595.00/W/0/0/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	7:00 - 7:10	0.17	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	7:10 - 7:30	0.33	WO/REP	31	H	P		REFER TO SAFETY TAB LOAD THE WELL WITH 25BBLs,  CALLED JOSH AND HE WANTS US TO PRESSURE TEST CIBP TO 1000# TO MAKE SURE CIBP IS STILL THERE.
	7:30 - 7:45	0.25	WO/REP	52	F	S		PT CIBP TO 1000# HELD FOR 3min AND THEN STARTED TO DROP OFF ONCE IT GOT TO 600psi ITS DROPPED FAST.  CALLED JOSH WITH RESULTS AND HE WANTS US TO TAG THE CIBP.
	7:45 - 8:00	0.25	WO/REP	31	I	S		TIH AND TAG CIBP AT 7210',  IT LOOKS LIKE PLUG DROP 5', CALLED JOSH AND HE WANTS US TO TEST AGAIN AND SEE IF THE PLUG DROPS AGAIN.
	8:00 - 8:30	0.50	WO/REP	52	F	S		PT CIBP TO 1000# HELD FOR 15min AND THEN STARTED TO DROP OFF ONCE IT GOT TO 600psi ITS DROPPED FAST.
	8:30 - 8:45	0.25	WO/REP	31	I	S		TIH AND TAG CIBP AT 7210',  CALLED JOSH AND HE WANTS US TO SET A MECHANICAL CIBP AROUND 7180'
	8:45 - 11:00	2.25	WO/REP	31	I	P		TOOH,  STD BACK 230JTS 2.375" TBG LD XN NIPPLE LD NOTCHED COLLAR
	11:00 - 13:00	2.00	WO/REP	31	I	P		TIH TO 7180',  232JTS 2.375" TBG XN NIPPLE MECHANICAL CIBP
	13:00 - 16:15	3.25	WO/REP	31	H	P		CIRCULATE GAS OUT  2.5BPM @ 500PSI FOR 480BBLs
	16:15 - 16:20	0.08	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	16:20 - 16:45	0.42	WO/REP	52	F	P		REFER TO SAFETY TAB PT CSG & CIBP TO 500# FOR 15MIN  GOOD TEST
	16:45 - 17:30	0.75	WO/REP	30	I	P		DRAIN PUMPS AND LINES, WINTERIZE PUMP, BLOW LINES OUT WITH AIR TO PREVENT FROZEN LINES
	17:30 - 18:00	0.50	WO/REP	30	G	P		SIW, COMPLETE POST DAY INSPECTION, SDFN RIG CREW TRAVEL HOME FOR THE DAY
3/1/2019	6:00 - 6:30	0.50	WO/REP	30	G	P		TRAVEL TO LOCATION, FILL OUT JSA & HAVE SAFETY MEETING W/RIG CREW, INSPECT EQUIPMENT PRE JOB CHECK TO ELIMINATE JOB ISSUES, FUNCTION TEST BOP, CHECK WELL PRESSURE TP-20#, CP-50#, SP-0#

US ROCKIES REGION  
**Operation Summary Report**

Well: CANNON W15-20

Spud date: 7/21/2008

Project: COLORADO-WELD-NAD83-UTM13

Site: CANNON W15-20

Rig name no.: BRIGADE 8/8

Event: CONST- CAP WELL WORK

Start date: 2/26/2019

End date:

Active datum: RKB @5,003.99usft (above Mean Sea Level)

UWI: NE/SW/0/2/N/66/W/15/0/0/6/0/S/2,595.00/W/0/0/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	6:30 - 6:55	0.42	WO/REP	48	B	P		RIG JSA & SAFETY MEETING REFER TO SAFETY TAB DO DAILY INSPECTION
	6:55 - 7:00	0.08	WO/REP	52	I	P		CHECK BRADENHEAD PRESSURE WITH CRYSTAL GAUGE, GAUGE READ 0PSI, TEST PASSED
	7:00 - 9:45	2.75	WO/REP	30	M	P		WARM UP EQUIPMENT AND WAIT ON SUPERVISOR
	9:45 - 9:55	0.17	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	9:55 - 11:00	1.08	WO/REP	52	F	P		REFER TO SAFETY TAB <b>PERFORM MIT TO 378psi FOR 20MIN</b> <b>PRESSURE HELD AT 378psi GOOD TEST</b> SENT RESULTS TO APC AND THEY GAVE APPROVAL TO CONTINUE
	11:00 - 13:00	2.00	WO/REP	31	I	P		TOOH, STD BACK 230JTS 2.375" TBG LD XN NIPPLE LD MST <b>MIRU RELIANCE WIRELINE</b>
	13:00 - 13:10	0.17	WO/REP	48	B	P		WIRELINE JSA & SAFETY MEETING
	13:10 - 14:00	0.83	WO/REP	34	D	P		REFER TO SAFETY TAB PU & RIH W/DUMP BAILER, <b>DUMP BAIL 2sx CMT ON CIBP @ 7180'</b> , POOH LD DOWN DUMP BAILER
	14:00 - 15:45	1.75	WO/REP	31	I	P		TIH TO 7145', 230JTS 2.375" TBG XN NIPPLE NOTCHED COLLAR RDMO RELIANCE WIRELINE
	15:45 - 16:30	0.75	WO/REP	30	I	P		DRAIN PUMPS AND LINES, WINTERIZE PUMP, BLOW LINES OUT WITH AIR TO PREVENT FROZEN LINES
	16:30 - 17:00	0.50	WO/REP	30	G	P		SIW, COMPLETE POST DAY INSPECTION, SDFN RIG CREW TRAVEL HOME FOR THE DAY
3/4/2019	7:00 - 7:30	0.50	WO/REP	30	G	P		TRAVEL TO LOCATION, FILL OUT JSA & HAVE SAFETY MEETING W/RIG CREW, INSPECT EQUIPMENT PRE JOB CHECK TO ELIMINATE JOB ISSUES, FUNCTION TEST BOP, CHECK WELL PRESSURE TP-0#, CP-0#, SP-0#
	7:30 - 7:55	0.42	WO/REP	48	B	P		RIG JSA & SAFETY MEETING REFER TO SAFETY TAB
	7:55 - 8:00	0.08	WO/REP	52	I	P		DO DAILY INSPECTION CHECK BRADENHEAD PRESSURE WITH CRYSTAL GAUGE, GAUGE READ 0PSI, TEST PASSED
	8:00 - 9:30	1.50	WO/REP	30	M	P		WARM UP EQUIPMENT AND INSPECT FOR ICE PLUGS
	9:30 - 10:30	1.00	WO/REP	31	Y	P		BROACH TBG DOWN TO 7030' W/1.90" BROACH
	10:30 - 11:30	1.00	WO/REP	30	J	P		ND BOP'S, ND WH, NU 5K WH, NU TOP FLANGE

US ROCKIES REGION  
**Operation Summary Report**

Well: CANNON W15-20		Spud date: 7/21/2008	
Project: COLORADO-WELD-NAD83-UTM13		Site: CANNON W15-20	Rig name no.: BRIGADE 8/8
Event: CONST- CAP WELL WORK		Start date: 2/26/2019	End date:
Active datum: RKB @5,003.99usft (above Mean Sea Level)		UWI: NE/SW/0/2/N/66/W/15/0/0/6/0/S/2,595.00/W/0/0/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	11:30 - 11:35	0.08	WO/REP	48	B	P		HIGH PRESSURE JSA & SAFETY MEETING
	11:35 - 12:30	0.92	WO/REP	52	F	P		REFER TO SAFETY TAB TORQUE UP WH, PT TBG HANGER AND MASTER VALVE TO 5000# FOR 15MIM
	12:30 - 14:00	1.50	WO/REP	30	C	P		GOOD TEST RIG DOWN PUMP & LINES, RD BOP'S, RD GUIDE CABLES, LOWER DERRICK
	14:00 - 14:30	0.50	WO/REP	30	G	P		SIW, COMPLETE POST DAY INSPECTION, SDFN RIG CREW TRAVEL HOME FOR THE DAY