



## **Foundation Creek B 7405**

**NW/SE - Section 23 – T4S – R102W  
1926 FSL and 2057 FEL  
Lease # COC2016  
API # 05-103-08414**

**Rio Blanco County, Colorado**

### **P&A Procedure**

**June 27, 2016**

Engineer:	Tanner Messer
Completions Coordinator:	Ryan Tompkins
Production Manager:	Tina Johnson

API Number:	05-103-08414	
Spud Date:	08/03/1979	
Elevation:	7,572'	
TD:	4,180' MD	
PBTD:	4,139' (est.)	
Surface Casing:	8-5/8" OD, 24 lb/ft, K55, set @ 237' TOC: Surface	
Surface Casing Properties:	ID:	8.097"
	Drift ID:	7.972"
	Collapse:	1,370 psig
	Burst:	2,950 psig
	Capacity:	.0637 BBL/ft
Production Casing	4-1/2" OD, 10.5 lb/ft, K55 set @ 4,180' TOC: 1,936'	
Production Casing Properties	ID:	4.052"
	Drift ID:	3.927"
	Collapse:	4,010 psig
	Burst:	4,790 psig
	Capacity:	.0159 BBL/ft
Tubing:	2 3/8" OD, 4.7 lb/ft, J55.	EOT @ 3,679'
Perfs.	Perf Interval:	3,640'-3,718'

**Objective**

Plug and abandon the Foundation Creek B 7405.

**Background**

The Foundation Creek B 7405 is a vertical well that was drilled in August 1979. It was completed in the Mancos B formation. This well was shut in during March 2014 due to being uneconomic to produce.

**Safety**

Safety meetings are to be held with all service company personnel prior to each job. Wellsite supervisor must notify contractors as to known hazards of which the contractors may be unaware. Well site supervisor must ensure that all workers are aware of their responsibilities and duties under the EH&S guidelines. All safety meetings will be recorded on the Encana daily completion reports in Wellview. Wellsite supervisor is responsible to ensure that all utility one calls and ground disturbance forms are completed and on location for safety review. All JSA, Ground disturbance forms and Utility one call paper work is to be turned into the safety department at the completion of the job.

**Regulations**

All verbal notifications and approval from government regulatory agencies will be recorded on the Encana daily report. The name of the individual contacted and the subject matter of approval or notification will be recorded.

### **Plug & Abandon Procedure**

1. Notify the Lander BLM office and COGCC at least 48 hours before plugging operations commence. Ensure that proper ground disturbance forms have been completed and one call for utility identification has been done and proper paper work is on location.
2. Hold a pre-job safety meeting. Discuss all aspects of the procedure with any involved personnel. Identify and address any safety concerns before the job begins.
3. MIRU workover unit.
4. ND wellhead, NU BOP.
5. TOH with 2 3/8" tubing, EOT set @ 3,679.
6. RU wireline & RIH w/ 4 1/2" gauge ring. ROH w/ gauge ring. PU 4 1/2" CIBP and RIH w/ CIBP to 3,590', 50 feet above the top perf @ 3,640'. Set CIBP & ROH w/ wireline.
7. Test casing to 500 psi.
8. Dump bail 6 sxs of Class G neat cement (15.8lb/gal, 1.15 Cu.Ft./sxs) on top of CIBP @ 3,590'. Estimated TOC @ 3,515', (~75' Cement cap).
9. RU wireline. RIH and set 4 1/2" CIBP @ 337' (100' below surface shoe). ROH w/ wireline.
10. RU wireline. RIH w/ perf gun to 287' (50' below surface shoe) and perforate casing with 4 holes. ROH w/ wireline
11. TIH w/ tubing to break circulation to surface through perfs @ 287' If circulation is established circulate hole clean to roll off tank and proceed to step 10a. If circulation was not established move on to step 10b.
  - a. R/U Cement crew. Mix and pump 88 sxs (10% excess) Class G neat cement to surface behind 4 1/2" casing and place 100' cement plug in 4 1/2" casing above perfs.
  - b. Pump 8 sxs of cement @ perfs located at 287' (~100' Cement cap) and plan to perform top cement job between 8 5/8" and 4 1/2" casing w/ 1" to surface.
12. POOH w/ tubing and spot 75' of Class G neat cement to surface (~6 sxs).
13. RDMO workover unit and ND BOP.
14. Dig out & cut off wellhead 4' below ground level, top off with cement if needed.
15. Weld information plate to casing stub with 1/4" weep hole, take GPS readings of well information plate for regulatory agencies.
16. Back fill hole & release equipment.
17. RDMO.



# Plug Volume Calculations

Cement above CIBP @ 3,590' & Surface Plug

**Capacity**

Casing/Tubing/Pipe | Hole | Drill Collars

Outside Diameter (O.D.): 4.5 in

Grade: K55

Weight: 10.5 lb/ft

Inside Diameter (I.D.): 4.0520 in

Length: 75 ft

I.D. in.	Gallons/Foot	Feet/Gallon	Barrels/Foot	Feet/Barrel	Cubic Feet/Foot	Feet/Cubic Foot
4.0520	6699	1.4928	0.159	62.6977	.0896	11.1669

Total Length Feet	Gallons	Barrels	Cubic Feet	Liters	Cubic Meters
75	50.24	1.2	6.72	190.18	.19

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Cement to surface @ 287' perfs

Cased Annular (8.625" x 4.5") + Open Hole Annular + Cased Hole 4.5"

70.93 Cu.Ft. + 11.39 Cu.Ft. + 8.96 Cu.Ft. = 91.28 Cu.Ft.

92.27 Cu.Ft. x 10% excess = 100.41 Cu.Ft.

Class G yield @ 1.15 Cu.Ft./sx = 87.31 sxs

**Tub/Cas/Pipe in Casing**

Outer Casing

Outside Diameter (O.D.): 8.625 in

Grade: K55

Weight: 24 lb/ft

Inside Diameter (I.D.): 8.0970 in

Inner Casing/Tubing/Drill Pipe

Outside Diameter (O.D.): 4.5 in

Grade: K55

Weight: 10.5 lb/ft

Inside Diameter (I.D.): 4.0520 in

Total Length: 287 ft

Number of String(s): 1

I.D. in.	Gallons/Foot	Feet/Gallon	Barrels/Foot	Feet/Barrel	Cubic Feet/Foot	Feet/Cubic Foot
8.097	1.8487	5409	0.440	22.7187	2471	4.0464

Total Length Feet	Gallons	Barrels	Cubic Feet	Liters	Cubic Meters
287	530.58	12.63	70.93	2,008.45	2.01

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**Tub/Cas/Pipe in Hole**

Hole Diameter: 7.875 in

Outside Diameter (O.D.): 4.5 in

Grade: K55

Weight: 10.5 lb/ft

Inside Diameter (I.D.): 4.0520 in

Total Length: 50 ft

Number of String(s): 1

Excess: 0 %

Diameter of Hole in.	Gallons/Foot	Feet/Gallon	Barrels/Foot	Feet/Barrel	Cubic Feet/Foot	Feet/Cubic Foot
7.8750	1.7040	5868	0.4057	24.6474	2278	4.3889

Total Length Feet	Gallons	Barrels	Cubic Feet	Liters	Cubic Meters
50	85.2	2.03	11.39	322.52	.32

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**Capacity**

Casing/Tubing/Pipe | Hole | Drill Collars

Outside Diameter (O.D.): 4.5 in

Grade: K55

Weight: 10.5 lb/ft

Inside Diameter (I.D.): 4.0520 in

Length: 100 ft

I.D. in.	Gallons/Foot	Feet/Gallon	Barrels/Foot	Feet/Barrel	Cubic Feet/Foot	Feet/Cubic Foot
4.0520	6699	1.4928	0.159	62.6977	.0896	11.1669

Total Length Feet	Gallons	Barrels	Cubic Feet	Liters	Cubic Meters
100	66.99	1.59	8.96	253.58	.25

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# EXISTING WELLBORE DIAGRAM

1926' FSL & 2057' FEL

Operator:	Encana Oil & Gas (USA) Inc.
Well Name:	Foundation Creek B 7405
Lease Number:	45143
Location:	NWSE Sec. 23-T4S-R102W
Field:	Foundation Creek
County, State:	Rio Blanco County, CO
API Number:	05-103-08414-0000
Diagram Date:	06/27/2016

KB 7583'  
GL 7572'

## Well History

Spud Date:	08/03/1979
Date TD Reached:	08/08/1979
Completion Date:	07/13/1980
Current Tbg Set:	07/17/2003

**Surface Csg:**  
8-5/8" 24#, K-55 set at 237'  
Cmt w/ 150 sx Class G

12-1/4" hole to 241'

TOC 1936'

7-7/8" hole

2-3/8" J-55 tbg at 3679'

Mancos B  
15, .385" perms from  
3640' - 3718'

Fill Tagged at 3747' 07/17/2003

**Production Csg:**  
4-1/2" 10.5 #, K-55 set at 4180'  
Cmt w/ 370 sx RFC

PBTD 4,139'

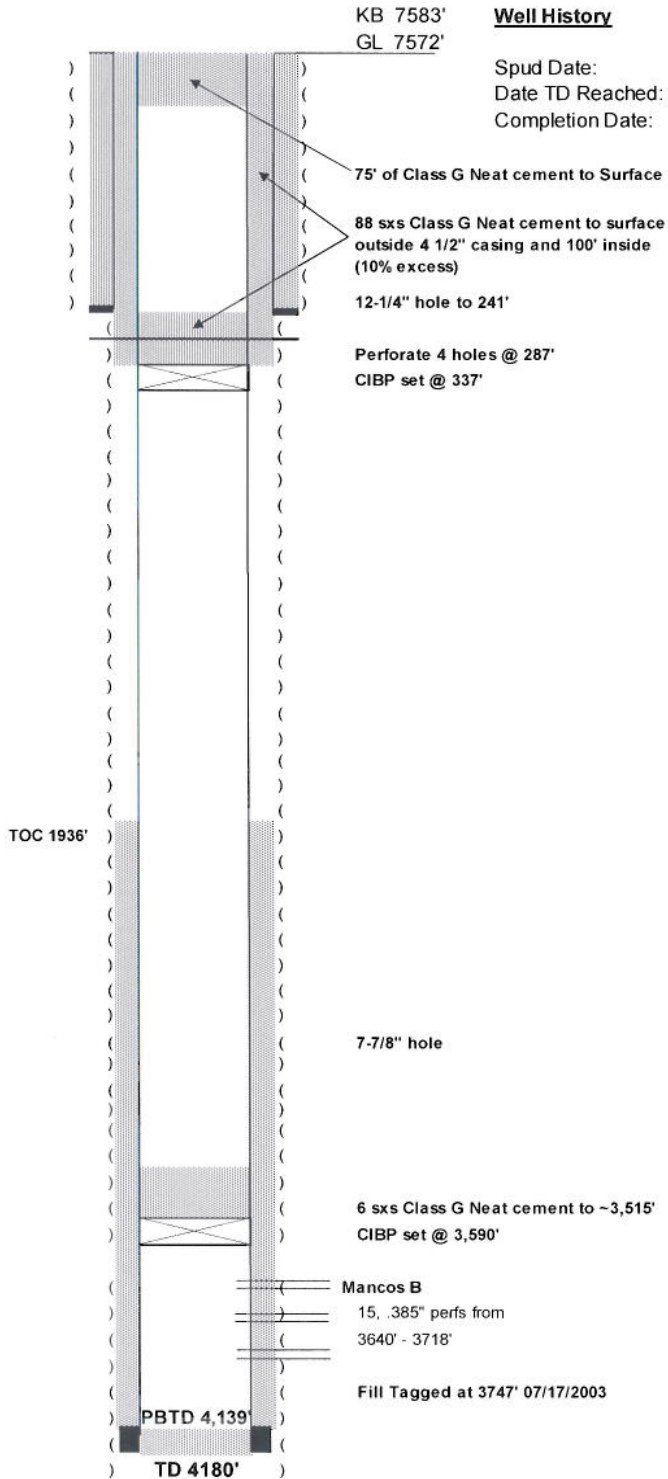
TD 4180'

# PROPOSED WELLBORE DIAGRAM

1926' FSL & 2057' FEL

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