Wexpro Company®

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Kasey Werkele
Director of Operations

January 28, 2021

Julie Murphy, Director
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

Re: Rule 502.b Variance Request for Wexpro Company
Bradenhead Valve Access and Monitoring
F Wilson 3, API 05-081-05577

Dear Ms. Murphy:

This letter has been prepared to request and substantiate the grant of a variance to Wexpro Company under Colorado Oil and Gas Conservation Commission (COGCC) Rule 502.b for the following COGCC Wellbore Integrity Rules:

- Rule 341.a. Equipment Requirements.

"(1) The Operator will equip bradenhead access on all Wells to the annulus between the production and surface casing as well as any intermediate casing with appropriate fittings to allow safe and convenient determination of pressure and fluid flow.

(2)To allow for Commission visual inspection at all times, all valves use for annular pressure monitoring will remain exposed and will not be buried. An Operator may use a rigid housing to protect the valves so long as the housing can be easily opened or removed by the

Operator upon request.

(3) These equipment requirements apply to all Wells, regardless of function."

- Rule 341.b. Bradenhead Monitoring.

"The Operator will monitor all Wells at a Director-indicated frequency for aspects of well integrity necessary to protect public health, safety, welfare, the environment, including groundwater, potential flow zones, and formations, and wildlife resources and in accordance with this Rule 341.

(1) After Rig Release, Prior to Stimulation. An Operator will monitor all annular casing pressures on a monthly basis. If at any point the bradenhead monitoring pressure is greater than 30% of the true vertical depth (TVD) in feet of the surface casing shoe expressed in psig, the Operator will contact the Director before proceeding with stimulation to determine whether mitigation or other measures are necessary to ensure isolation consistent with the Commission's Rules."

"(4) Through the Remaining Life of the Well. For all Wells in the state, an Operator will monitor and record production casing pressure and all annular casing pressures on a monthly basis or at a Director-approved frequency. If a Well's bradenhead pressure is greater than 30% of the true vertical depth (TVD) in feet of the surface casing shoe expressed in psig, or a lower threshold set by a Commission Order, or if a Well flows liquids or continuous gas from the bradenhead annulus an operator will

A. Report the bradenhead pressure to the Director on a Form 17, Bradenhead Test;

B. Take immediate action to remedy such an annular pressure; and

C. Perform diagnostic testing to determine if the annular casing pressure is sustained. An Operator will report diagnostic testing results to the Director on a Sundry Notice, Form 4, within 60 days of submitting a Form 17 pursuant to Rule 341.b.(4)A. If the diagnostic testing confirms sustained casing pressure, an Operator will develop and implement a pressure management plan and provide the plan with the Sundry Notice."

(5) **Records.** An Operator will keep bradenhead monitoring records required by Rule 341.b. available for inspection by the Director for a minimum of 5 years after the monitoring was performed."

341.c. **Annual Bradenhead Testing and Reporting.** For all Wells other than coalbed methane wells, an operator will perform an annual bradenhead test and submit the data to the Director on a Form 17 or other Director-approved method. For coalbed methane wells, an Operator will perform bradenhead testing in accordance with Rule 608.e.

Well History

The F Wilson #3 well is located in Moffat County, CO. The well was Drilled in 1934 to a depth of 2,822'.92 and Completed in an open hole approach in the Wasatch Formation from 2,822' - 2,894'.

On August of 1984 the tubing was pulled to remove a downhole choke. The tubing was ran immediately.

In 2019 production deficiencies were observed. Wireline services were deployed to evaluate for flow assurance and subsequently a chemical treatment was placed down hole to dissolve dehydrated paraffin which successfully allowed to restore production.

Today (Year 2021), the well continues to produce on average 200 MCFD.

Wellbore Information

Casing

- 12-1/4", 50#, DBX Surface Casing landed at 211.1' and cemented with 100 sacks.
- 8-1/4", 32# DBX & 8-5/8" 32# seamless Production Casing landed at 2,822.92" and cemented with 250 sacks.
- 11" Open Hole (TMD at 2,894').

Tubing

- 2-3/8", 4.6#, J-55 tubing landed at 2,739.07".

Due to drilling and completion techniques used during the 1930's, many challenges and personnel safety issues exist today while trying to gain access to the well's casing strings 87 - years after the completion. Such information is requested to be considered in allowing issuance of the requested variance.

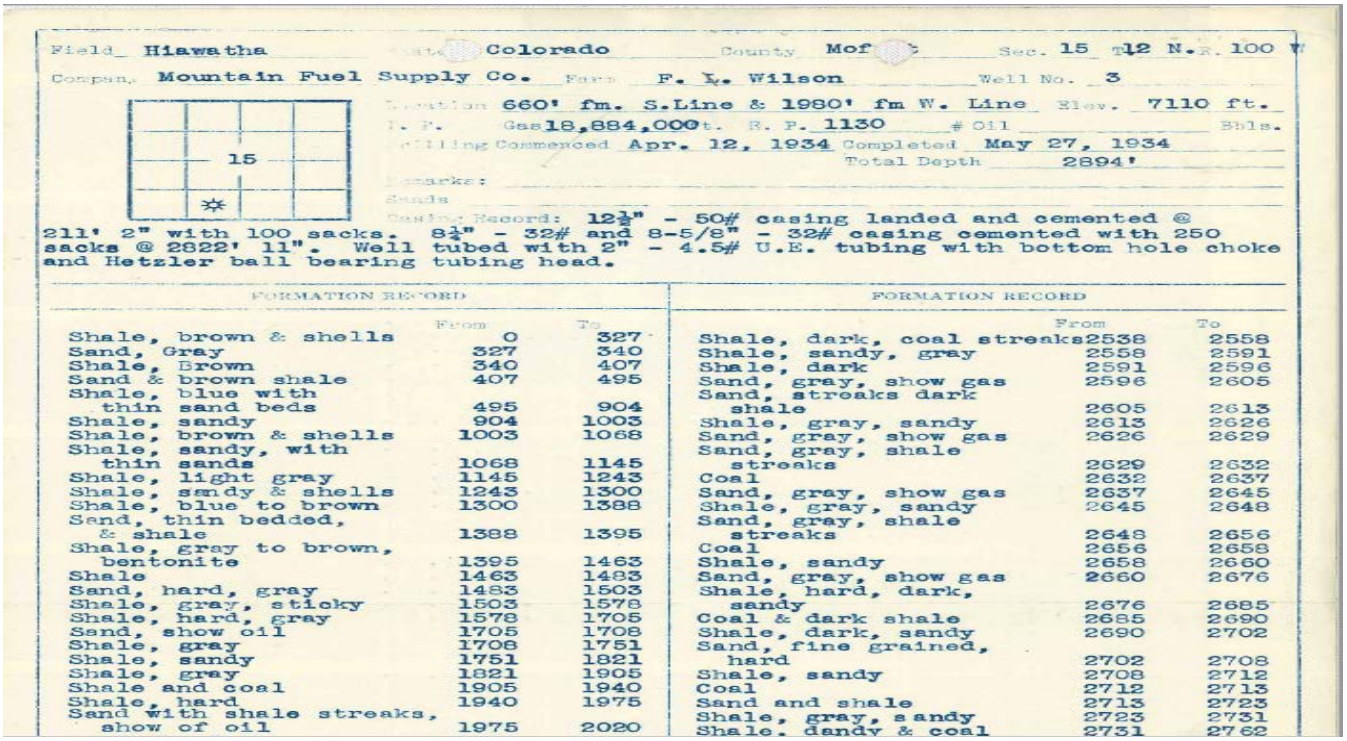
Wexpro requests a variance due to the age, method in which the wellbore was constructed, and due to the absence of liquids & gases in the annulus. Listed below are some major safety and environmental concerns:

1. On January 11, 2021 Wexpro field operations dug seven feet (7') deep around the F Wilson # 3 and found the 12 - ¼" Surface Casing with an open anulus. At the moment, safely and without a major intervention, we are not able to make any modifications to monitor the surface pressure.

2. The Surface Casing is placed at 211.17' and the cement appears to have circulated to surface which indicates the Surface Casing is fully cemented.

3. The Production Casing in the F Wilson 3 is set at 2,822.92'. And its top of cement (TOC) was identified at 1,174' based on volumetric. A Cement Bond Log CBL has not been identified in the well records. The open anulus between the Surface Casing shoe and the Production Casing top of cement is 963' (from ~ 211.17' – 1,174').

4. Per - the F Wilson #3 Mud Log Records, the interval 211.17' -1,174' is shale rock dominant with some sand streaks. No water or hydrocarbons were identified. Neither of these were identified during digging nor have been identified during the time that the pit has been exposed. This information correlates to the Mud Logs and suggest the absence of liquids long term.



Field Hiawatha State Colorado County Mof[illegible] Sec. 15 T12 N. R. 100 W

Compan. Mountain Fuel Supply Co. Farm F. L. Wilson Well No. 3

15

Location 660' fm. S.Line & 1980' fm W. Line Elev. 7110 ft.

I. P. Gas 18,884,000 cf. R. P. 1130 # Oil Bbls.

Drilling Commenced Apr. 12, 1934 Completed May 27, 1934

Total Depth 2894'

Remarks:

Sands

Casing Record: 12½" - 50# casing landed and cemented @ 211' 2" with 100 sacks. 8¼" - 32# and 8-5/8" - 32# casing cemented with 250 sacks @ 2822' 11". Well tubed with 2" - 4.5# U.E. tubing with bottom hole choke and Hetzler ball bearing tubing head.

FORMATION RECORD

	From	To
Shale, brown & shells	0	327
Sand, Gray	327	340
Shale, Brown	340	407
Sand & brown shale	407	495
Shale, blue with thin sand beds	495	904
Shale, sandy	904	1003
Shale, brown & shells	1003	1068
Shale, sandy, with thin sands	1068	1145
Shale, light gray	1145	1243
Shale, sandy & shells	1243	1300
Shale, blue to brown	1300	1388
Sand, thin bedded, & shale	1388	1395
Shale, gray to brown, bentonite	1395	1463
Shale	1463	1483
Sand, hard, gray	1483	1503
Shale, gray, sticky	1503	1578
Shale, hard, gray	1578	1705
Sand, show oil	1705	1708
Shale, gray	1708	1751
Shale, sandy	1751	1821
Shale, gray	1821	1905
Shale and coal	1905	1940
Shale, hard	1940	1975
Sand with shale streaks, show of oil	1975	2020

FORMATION RECORD

	From	To
Shale, dark, coal streaks	2538	2558
Shale, sandy, gray	2558	2591
Shale, dark	2591	2596
Sand, gray, show gas	2596	2605
Sand, streaks dark shale	2605	2613
Shale, gray, sandy	2613	2626
Sand, gray, show gas	2626	2629
Sand, gray, shale streaks	2629	2632
Coal	2632	2637
Sand, gray, show gas	2637	2645
Shale, gray, sandy	2645	2648
Sand, gray, shale streaks	2648	2656
Coal	2656	2658
Shale, sandy	2658	2660
Sand, gray, show gas	2660	2676
Shale, hard, dark, sandy	2676	2685
Coal & dark shale	2685	2690
Shale, dark, sandy	2690	2702
Sand, fine grained, hard	2702	2708
Shale, sandy	2708	2712
Coal	2712	2713
Sand and shale	2713	2723
Shale, gray, sandy	2723	2731
Shale, dandy & coal	2731	2762

5. The pictures below are from the F Wilson #3 currently dug area, and subsequent pictures are of wells with similar operations the F Wilson 3 would require to modify the surface casing in order to monitor its pressure.

Figure 1: F Wilson #3 Casing Clamps, Hiawatha Field, CO

Similar wells in the area

Figure 2: Well Drilled in 1933; Images from Excavation during P&A Operations

Figure 3: GL Cappers 2, North Baxter Field, Wyoming

6. Due to the size of excavation that would need to occur to safely plumb into annuli for the monitoring requirements to be met and that being prior to the inevitable plugging of this well, it will absolutely be a stability/safety concern for the work-over rig to rig up on a disturbed and backfilled area. The rig could sink and/or fall over if it does not have a stable base.

7. Existing, or retired lines near where we would have to expose (offset pipelines, well flowlines) could also be a safety concern. If a live gas line is hit during excavating, the exposure to pressure could seriously injury or cause death to personnel.

8. Additional casing integrity and stabilization issues may arise when digging further around a wellbore that initially was completed in the 1930's. Without wellbore stabilization, this could potentially cause more issues downhole, including possible undisturbed migrated fluids.

As mentioned, Wexpro Company is requesting a variance due to the age and the method in which the wellbore was constructed.

We sincerely appreciate your consideration of this variance request. Please contact Scott Colvin, Supervisor District Drilling Operations, at (307) 350-8990 or Scott.Colvin@dominionenergy.com, Juan Sosa, Production Engineer, at (940) 229-4130 or Juan.Sosa@dominionenergy.com ; or Tammy Fredrickson, Senior Permit Agent at (307) 352-7514 or by email at Tammy.Fredrickson@dominionenergy.com with questions.

Sincerely,

Kasey Werkele
Director of Operations

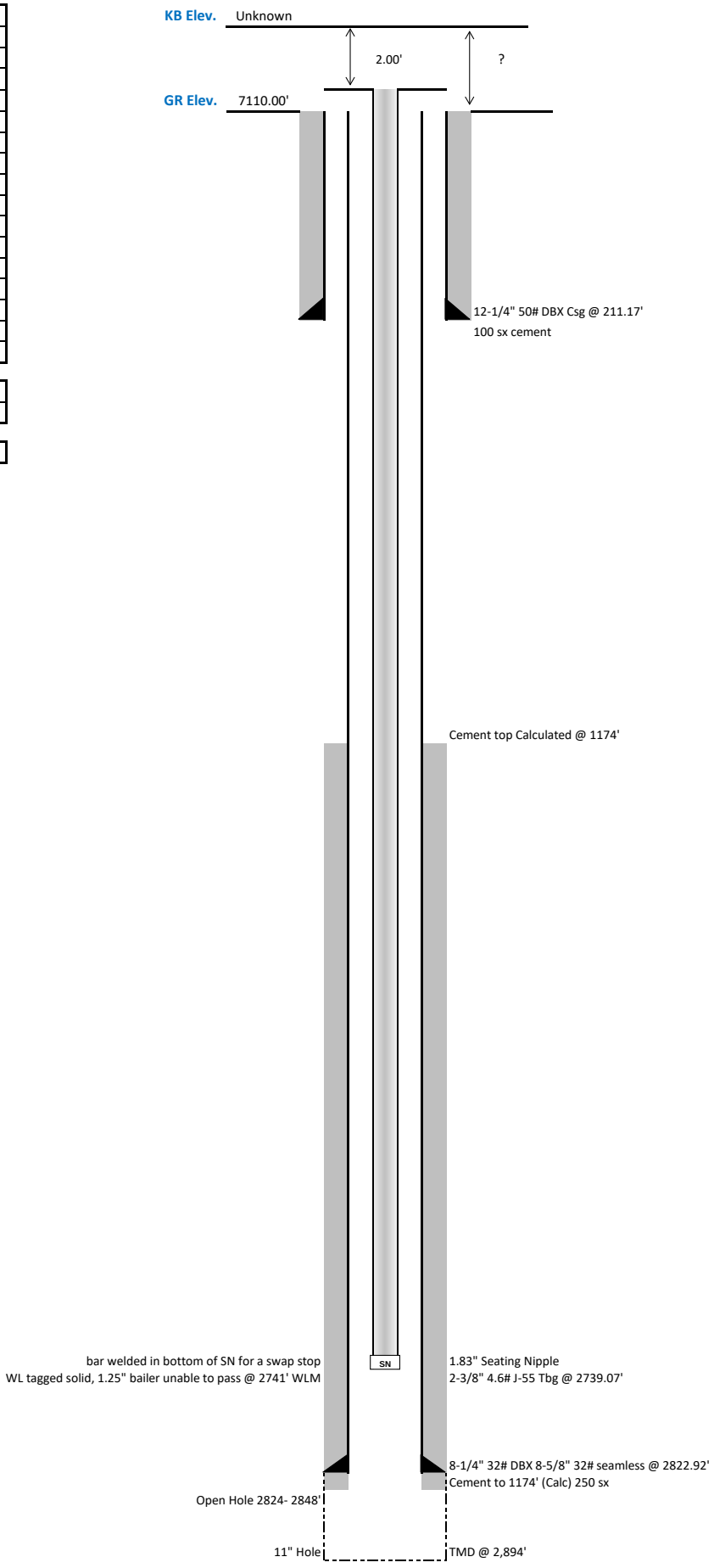
Wellbore Diagram

Well Name:	F Wilson 3
County, State	Moffat, CO
Legal Description:	LOT 6 SW 15-12N-100W
API:	05-081-05577
SHL:	660' FSL 1980' FWL
Updated By:	Jeff Bluemel
Date Updated:	1/14/2020
Reviewed By:	Juan Sosa
Reviewed Date:	1/14/2020
Spud Date:	4/12/1934
TD Date:	5/27/1934
IP Date:	
Well TMD:	2,894
Orientation:	Vertical
Plug Back MD:	
Bridge Plug MD:	
Producing Frac Jobs:	Open Hole

Latitude	40.994689
Longitude	-108.622509

As Of Wireline	11/26/2019

All measurements are in KB & MD unless otherwise specified.



Tubing Report

Well Name:	F Wilson 3	**Date Landed:**	10/30/1988
KB (above ground):		**KB (above Tbg Spool):**	2.00

Quantity	Description	O.D. (In.)	I.D. (In.)	Length (Ft.)	Top (Ft.)	Depth (Ft.)
	Tbg Spool Top (depth)			2.00		2.00
1	Nation E Tbg Hanger					
133	2-3/8" 4.6# J-55 8rd eue Tbg			2,737.07	2.00	2,739.07
		Maximum	Minimum	Total		Total
Calculations				2,737.07		2,739.07

Notes:

10/19/1988: welded 8-5/8" nipple onto casing stub; installed 8-5/8" X 10-3/4" NSCo. Type "E" wellhead, 10-3/411 8rd X 10" 3000 psi companion flange, 10" 3000 psi by 7-1/16" 3000 psi crossover spool and a 7-1/16" 5000 psi BOP; ran Full Wave Sonic and Neutron Log with McCullough

10/21/1988: picked up a seating nipple with a pin welded in it for a swab stop; tripped in 133 joints (20' joints) of 2-3/8" OD, 4.6#, J-55, 11-1/2 Vee thread EUE tubing; landed tubing at 2739.07' 2' above GL (no KB)

Signed:		**Date Signed:**	10/21/1988