



**CATHEDRAL FED O-31 (P&A)**  
**695' FSL & 1612' FEL**  
**SWSE SEC. 31, T3S, R101W**  
**RIO BLANCO, CO**

**(API#0510308249)**

**Purpose: P&A**

**Date: 01/26/2026**

**AFE: Pending**

**KBE: 7022' (9')**  
**GLE: 7013'**  
**PBTD: 1772' (9/8/1986)**  
**TD: 5877'**  
**CURRENT EOT: 1720'**  
**TBG DETAIL: 2 1/16 J55**  
**ETOC: TOC 1575' (SEE 9/10/1986 WELL NOTES BELOW)**

**API NUMBER: 0510308249**  
**LEASE NUMBER: C-20419**  
**FED SURF/ FEDERAL MINERALS**  
**~LAT/LONG: 39.739367/108.770464**  
**PERFS: CGATE (1732'-1756')**  
**LAST RIG WORK: 9/18/1986?**

**CASING DETAILS SHOWN BELOW:**  
**TUBING DETAILS SHOWN BELOW:**

Casing Strings						
Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Set Depth (ftKB)		
Surface	9 5/8	36.00	J-55	173.0		
Intermediate	7	23.00	J-55	1,782.0		
Production	4 1/2	10.50	J-55	5,850.0		
Perforations						
Date	Top (ftKB)	Btm (ftKB)	Zone Name			
9/18/1986	1732	1756	Castlegate			
7/27/1979	5698	5766	Dakota			
Tubing Strings						
Tubing Description	Run Date	String Length (ft)	Set Depth (ftKB)			
Tubing - Production	9/18/1986	1,710.50	1,719.5			
Item Des	Icon	Jts	Model	OD (in)	Grade	Len (ft)
Tubing			Integral Jt.	2 1/16	J-55	1710.5

**WELL DATA:**

Tubular/Borehole	ID	Drift inches	Collapse psi	Burst psi	Capacities		
	inches				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg	1.995	1.901	8100	7700	0.1624	0.02171	0.00387
7" 23# J-55 csg	6.366	6.241	3270	4360	1.6535	0.2210	0.0394



Annular Capacities	Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" tbg. X 7" 23# csg	1.4233	0.1903	0.0339
7" X 9.625" 36# csg	1.2478	0.1668	0.0297
7" x 8.75" borehole	1.1245	0.1503	0.0268

## GEOLOGIC INFORMATION:

Formation	Depth to top, ft.
Mesaverde	Surface
Castlegate	1710'
Mancos B	2798'
Dakota	5582'

## WELL HISTORY:

SPUDED IN 9/4/1978 AND DRILLED TO DAKOTA WITH TD OF 5877'  
 PLUGGED BACK TO CASTLEGATE IN SEPTEMBER 1986. DURING PLUGBACK 4.5" CASING WAS CUT AT 2199' AND CEMENT PLUGS WERE SET TO COVER PERFS, CASING STUB, AND 7" CASING SHOE. SEE WELL BORE DIAGRAM FOR DETAILS.

## CATHEDRAL FED O-31 PLUG & ABANDONMENT PROCEDURE

### GENERAL

- CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- BLOW DOWN BRADEN HEAD AND SURFACE CASING AS NEEDED.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, 15.8ppg, YIELD 1.145 CUFT/SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESPONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME.
- 9# BRINE WILL BE PLACED BETWEEN ALL PLUGS.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDES. PREMIX 5 GALLONS PER 100 BBLs FLUID AND IS TO BE PLACED BETWEEN ALL PLUGS.
- NOTIFY APPROPRIATE AGENCY 48 HOURS BEFORE MOVING ON LOCATION.

### PROCEDURE

**Note:** Approx. 91 SXS Class "G" cmt needed for procedure and (1) 7" CICR AND (1) 7" CIBP

1. MIRU, NDWH, AND NUBOPE. **NOTE: UTILIZE STANDARD WELL SERVICES GUIDELINES FOR WELL CONTROL WHENEVER RIGGING UP BOPE AND WIRELINE, OR WHENEVER TRIPPING IN OR OUT OF THE WELL.**
2. (P1) ISOLATE CASTLEGATE PERFS (1732'-1756'); LAYDOWN TUBING FROM WELL. PU 2.375 WORK STRING WITH CIBP.. TIH TO ~1772' AND TAG CEMENT. PUH TO ~1682' AND SET CIBP. FILL HOLE WITH 9# BRINE THEN PUMP A MINIMUM OF (120 FT) CMT F/ 1562' TO 1682' (23 SXS, 26.52 FT3, 4.72 BBLs).



3. PRESSURE TEST CASING. IF CASING LEAKS, PICK UP PACKER AND FIND LEAK THEN ADJUST PLUGS ACCORDINGLY. WILL NEED APPROVAL FROM REGULATORY AGENCIES FOR ANY CHANGES IF LEAK IS FOUND.
4. (P2) PROTECT SURFACE CASING SHOE (173') AND SURFACE (105'): POOH LAYING DOWN UNNEEDED TUBING. RIH W/ WIRELINE AND PERFORATE AT 223'. ESTABLISH CIRCULATION UP ANNULUS. IF SUCCESSFUL, TIH W/ CICR AND SET AT ~193'. ATTEMPT TO CEMENT F/ 223' TO SURFACE IN THE 7" X 9.625" ANNULUS WITH (32 SXS, 36.37 FT3, 6.48 BBLs) AND INSIDE THE 7" CASING WITH 30' BELOW CICR AND 50' ON TOP OF CICR (16 SXS, 17.68 FT3, 3.15 BBLs). TOTAL VOLUME FOR INSIDE AND OUTSIDE IS: (48 SXS, 54.05 FT3, 9.63 BBLs). MONITOR ANNULUS FOR RETURNS AND PRESSURE (VACUUM) DURING CEMENTING AND AFTER CEMENT SHUT DOWN. LD ALL TUBING. NDBOPE.
5. CUT OFF WELLHEAD, CEMENT INSIDE 7" UTILIZING 1" TO 105' (20 SXS, 23.21 FT3, 4.13 BBLs) AND TOP OFF ALL ANNULI AS NEEDED. INSTALL MARKER PER REGULATIONS.
6. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB. SURFACE RECLAMATION TO BE PERFORMED IN ACCORDANCE WITH REGULATIONS.

O-31-3-101-S

Dakota P&A procedure

Dakota perms 5,698' - 5,766'

1. Set balanced plug w/tbg at 5,748' KB. 50 sx Class H - across perms. Planned top of cement at 5,100' KB. Tagged top of cement at 5,284' KB.
2. Cut and pulled 4½" production casing at 2,199' KB.
3. Set balanced plug across 4½" stub. Tbg set @ 2,262' KB. 100 sx Class H. Planned cement top at 1,750' KB. 7" shoe @ 1,782' KB. Tagged top of plug at 1,834' KB.
4. Set balanced plug across 7" shoe. Tbg set at 1,833' KB. 20 sx at 1,833' KB. 20 sx Class H. Planned cement top at 1,742' KB. Tagged top of cement at 1,753' KB. Drilled out to 1,772' KB. 7" shoe at 1,782' KB.



Well Name D-31-3-101-S Date 10 Sept '86

Field \_\_\_\_\_ Location \_\_\_\_\_

Casing Size \_\_\_\_\_ Casing Drift \_\_\_\_\_

Tubing Size \_\_\_\_\_ Tubing Drift \_\_\_\_\_

Fluid Type \_\_\_\_\_ Vis. \_\_\_\_\_ Weight \_\_\_\_\_

Chemicals Mixed \_\_\_\_\_

BOP Rating and Date of Test \_\_\_\_\_

Contractor CRC Cdo Well #33 Rig Derrick Capacity 130,000#

Tubing Safety Values on Location yes

Daily Work Details L.D. 48 jts 2 1/16" (Waiton Schlumberger)

Rig up Schlumberger, run GR-CBL-CL CBL's. Top of cement at 1575'

(top perf at 1732' - 157' below top of cement), Rig down Sch.

OHL = 2' = CBL Depth / R/H w/ 2 7/8" w.s., swab well down to 1100'

TOOH # L.D. 2 7/8" w.s. / Note thin pipe at 1732' to 1740' on CBL.

Fluid appeared to be gas cut when swabbing.

Rig up Sch., perf from 1732'-1742' (41 shots) #