DRILLING & COMPLETION HISTORY

CONSOLIDATED OIL & GAS, INC.

COLLINS NO. 1-31

San Juan County, New Mexico April 12, 1962

Location:

1750' F/NL & 1190' F/WL

Section 31-T29N-R10W, NMPM

Elevations:

5645' GL (corrected)

5657' KB - all measurements from KB

Spud:

March 17, 1962

Drilling Completed: Well Completed:

March 19, 1962 March 29, 1962

Total Depth:

1960' Drilled 1921' Plug Back

Casing:

Surface:

7 5/8" 26.40# J-55 cemented at 110' with 35 sx. regular 2% CaCl₂ cement.

Production:

4 1/2" 16.6# drill pipe set at 1949' with 150 sx. regular 4% gel cement.

Tubing:

l" regular set at 1833'

Logs:

Lane Wells Gamma Ray Neutron

Cores & Drillstem Tests:

None

Formation Tops: Log

Pictured Cliffs

1851 (+3806)

Producing Perforations:

1838' - 1914'

Treatment:

Sand water frac with 100,000# 20-40

sand and 100,000 gal. water.

Initial Potential:

Flow volume thru 3/4" choke: 2500 MCFD

Calculated Absolute Open Flow Potential:

2710 MCFD

WELL:

COLLINS NO. 1-31

_1750' F/NL, 1190' F/WL, Sec. 31-T29N-R10W

FIELD:

Fulcher Kutz (P.C.), Farmington Undesignated

COUNTY:

San Juan STATE: New Mexico

ELEVATIONS:

5645' · GL

_5657**'** K

3/16/62

Will move on rotary rig today.

3/17/62

Spudded well at 2:30 a.m. 3/17/62. Drilled 120' of 9 7/8" hole, running surface casing.

3/18/62

Ran 3 joints of 7 5/8" surface casing set at 110' KB. Cemented with 35 sx. regular 2% $CaCl_2$. Plug down 7 a.m. 3/17. Good returns. Drilling at 1240'. Drilled 1120' of sand and shale. Bit No. 3 in hole. Drilling with water. Dev. $1/2^{\circ}$ at 500', $3/4^{\circ}$ at 925'.

3/19/62

Rotary TD 1950'. Ran 71 joints 4 1/2" 16.6# drillpipe for casing for total pipe of 1955', set at 1949' KB. Float collar at 1920', one centralizer on shoe joint, one at 1755'. Cemented with 150 sx. of regular 4% gal. Plug down 2 a.m. 3/19. Bumped plug with 800 lbs. Shut well in.

3/20/62

Will complete this week.

3/21/62

Ran Gamma Ray Neutron log.

3/22/62

Will complete tomorrow.

3/23/62

Will perforate and frac today.

3/24/62

Rigged up Dowell pump truck at 6:30 a.m. 3/23/62, pressured up on casing

3/24/62 Cont'd.

2300#, pressure held. 9:30 a.m. 3/23/62 rigged up lane Wells perforated two per foot super dyna jets 1838'-1914'. 12:30 p.m. 3/23/62 rigged up Dowell (3) allisons.

Breakdown pressure	3000 <i>‡</i>
Maximum treating pressure	2600 <i>‡</i>
Maximum pressure	3000#
Minimum pressure	1800#
Over treating pressure	2100#
Instant shut-in pressure	700#
Ten minute shut-in pressure	600 <i>‡</i>
Breakdown and fill	16 bbls.
Treatment fluid	2368 bbls.
Over flush	14 bbls.
Disp.	27 bbls.
Lbs. of sand	100,000 lbs. 20-40
Number of balls	55
2 1/2# per 1,000 gals. water	J-100 gel.
Injection rate	39 BPM

Well shut-in, will complete with rig from Walz.

3/25/62

Will complete when tubing is run on Walz.

3/26/62

Will complete today.

3/27/62

Rigged up completion rig strung into top of sand. Had 58' of sand in hole. Attempted to swab. Swab went to 75' could not get below this point. Rigged up with gas, started blowing hole down at 8 p.m. Present operation, blowing hole at 1834', 4' above perforations. Well making a lot of sand and water, well will unload by itself. Heading real bad.

3/28/62

Blowing hole to top of perforations, making water and sand. Blew well for 12 hours, after blowing to bottom pulled tubing, well logged off. Went back in hole with tubing, found sand 30° above perforations.

3/29/62

Blowing well, producing at rate of 2740 MCFD with heavy spray of water. Blew well till ll a.m., pulled and laid down 2" tubing, ran 87 joints (1827) of 1" regular tubing set a 1833 KB. Released rig at 3 p.m. At 4 p.m. well flowing 1800 MCFD, very wet.

rage 3

3/30/62

Shut well in for 7-day test at 4 p.m. 3/29/62. Making estimated 3000 MCFD.

3/31/62

Shut-in for 7 day test.

4/1/62

Shut-in for 7 day test.

4/2/62

Shut-in for 7 day test.

4/3/62

Will test today.

Operator Consolidated Oil & Gas, Inc.		Collins 1-31		
1750' F/NL, 1190' F	WL, Sec. 31-T29N	San Juan	New Mexico	
Formation		Pool		
Pictured Cliffs		Fulcher Kutz		
Casing: Diameter 4 1/211	Set At: Feet 1949	Tubing: Diameter	Set At: Feet 18331	
Pay Zone: From	То	Total Depth:		
1838'	1914		•	
Stimulation Method		Flow Through Casing	Flow Through Tubing	
Sand water frac			X	

Choke Size, Inches 0.750		Choke Constant: C 14.1605				
Shut-In Pressure, Casing, 57	PSIG 7	+ 12 = PSIA 589	Days Shut-In	Shut-In Pressure, Tubing 577	PSIG	+ 12 = PSIA 589
Flowing Pressure: P	PSIG 1	+ 12 = PSIA	183	Working Pressure: Pw 171	PSIG	+ 12 = PSIA - 183
Temperature: T	° F 2	n =	.75	Fpv (From Tables)		Gravity . 70

CHOKE VOLUME = Q = C x P, x F, x Fg x Fpv

 $Q = 14.1605 \times 183 \times 1.0178 \times .9258 \times 1.025 = 2500 MCF/D$

OPEN FLOW = Aof = Q
$$\left(\begin{array}{c} 1 \\ P_c \\ P_c - P_w \end{array} \right)^n$$

Aof =
$$\left(\frac{333,000}{299,400}\right)^n$$

TESTED BY Clyde Phillips

WITNESSED BY_____

F. Januar