

OIL CONSERVATION COMMISSION  
1000 Rio Brazos Rd.  
Aztec, New Mexico

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE 11-2-59

RE: Proposed NSP \_\_\_\_\_

Proposed NSL \_\_\_\_\_

Proposed NFO \_\_\_\_\_

Proposed DC ✓

Gentlemen:

I have examined the application dated 10-29-59  
for the Consolidated Gov't Lease #1-13 13-31N-13W  
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

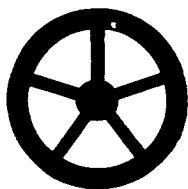
approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

OIL CONSERVATION COMMISSION

*A. R. Humphreys*





# Consolidated Oil & Gas, Inc.

## Executive Offices

312 DENVER U. S. NATIONAL  
BANK BUILDING  
1740 BROADWAY  
DENVER 2, COLORADO  
PHONE AMHERST 6-1306

October 30, 1959

Mr. A. J. Carlson, Jr.  
Executive Director  
Bureau of Land Management  
Department of the Interior  
Washington, D. C.  
Dear Mr. Carlson:

Re: Our Government-Status No. 1  
Well of Sec. 13, T. 24N-13E,  
San Juan County, New Mexico

Dear Mr. Carlson:

We request your administrative approval of a Dakota - Mesa Verde dual gas completion which has been recently effected at ~~subject~~ location. In support of this application, we offer the following:

1. Two copies of Application for Dual Completion form.
2. A copy of the Radioactivity log denoting formation tops and perforation intervals.
3. A plat outlining in red the 320-acre unit on which the requested dual completion is located. Also it is indicated that Consolidated Oil & Gas, Inc. is the operator to the South, Southern Union Gas Company is the operator to the East and we are unable to ascertain who might be operators of the other adjacent acres, a all of which is undeveloped.
4. A copy of the Initial Completion report dated August 15, 1957.
5. A copy of the current Recompletion Report with an attached schematic diagram illustrating the dual completion hookup.

By copy of this letter and pertinent attachments, we are informing Southern Union Gas Company of our proposal and requesting that they indicate their approval by a letter to you with a copy to us.

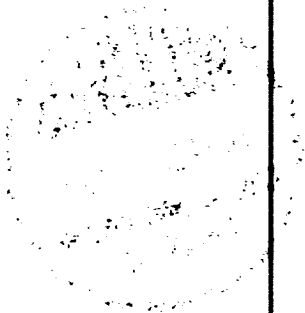
We are, by copy of this letter to Mr. Emery Arnold, District Engineer for the Commission in Astec transmitting the required C-103 and C-110 forms for the Dakota formation. Also we point out that the well was shut in on October 27th for the initial 7-day pressure build up determination after which time routine potential



Consolidated City & County

Executive Office

1140 BROADWAY  
DENVER 2, COLORADO  
PHONE AMHERST 4100  
CITY DENVER 11, NATIONAL  
BANK BUILDING



tests and packer leakage tests will be performed. These data will be supplied as they are secured.

We believe that you now have all of the information necessary to approve our application for dual completion and respectfully request your early consideration and acknowledgement.

Very truly yours,

CONSOLIDATED OIL FIELD, INC.



J. E. Ladd, Vice President

J. E. Ladd

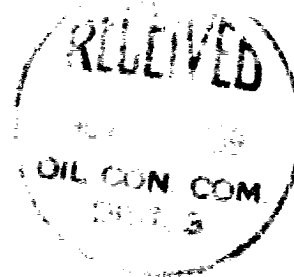
Enclosures

Mr. A. M. Wiederkehr  
Southern Union Gas Company  
Court Building  
Dallas, Texas

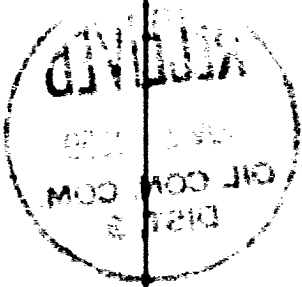
Mr. Emery Arnold  
District Engineer  
New Mexico Oil Conservation Commission  
1800 Rio Arayos Road  
Aztec, New Mexico

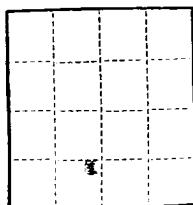
Mr. Robert C. Fenison  
3608 Sunset Avenue  
Farmington, New Mexico

Mr. W. L. McGrath  
U. S. Geological Survey  
Farmington, New Mexico



42-377





(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Santa Fe  
Lease No. 074707  
Unit 4

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	<b>Supplemental Report of Dual Completion</b>

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 29, 1959

Government-Starr

Well No. 1-13 is located 1165 ft. from NKK line and 140 ft. from E4 line of sec. 13

1/4 Sec. of Sec. 13

(1/4 Sec. and Sec. No.)

31N

(Twp.)

13W

(Range)

N. M. S. M.

(Meridian)

Blanco

(Field)

San Juan

(County or Subdivision)

New Mexico

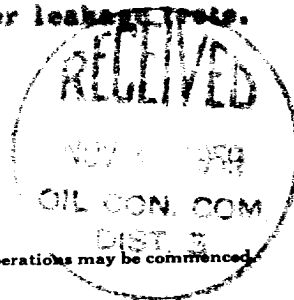
(State or Territory)

The elevation of the derrick floor above sea level is 6786 ft. S.S.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

- (1) Killed Mesa Verde and pulled tubing.
- (2) Drilled out 7" casing bridge plugs.
- (3) Cleaned out to L. B. T. D. of 6715'
- (4) Perforated - fraced and completed as per attached recompletion report dated 10-29-59.
- (5) Now shut in for pressure buildup, potential and packer leakage tests.



I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company CONSOLIDATED OIL & GAS, INC.

Address Box 112, 1740 Broadway,

Denver, Colorado

By J. B. Ladd  
J. B. Ladd  
Vice President

Title





RECOMPLETION REPORT  
CONSOLIDATED OIL & GAS, INC.  
NO. 1-13 GOVERNMENT STARR  
(Mesa Verde - Dakota Dual)  
October 29, 1959

Basic Data:

Location: 1185' FSL & 1495' FWL  
Sec. 13-T31N-R13W  
San Juan County, New Mexico

Elevation: 5784' Gd.  
5796' K. B. (Original)

Rigging Up: 9/28/59 )  
Released Rig: 10/25/59 ) Cunningham Drilling Company  
Cable Tools

Total Depth: 6716'

Plug Back Total Depth: 6715'

Casing Program:

Surface: 10 3/4"-32.75#-H-40 set @ 170' KB and cemented to surface.

Production String: 7"-20 & 23#-J-55 set @ 4829' KB and cemented with 135  
sacks with 6% gel. cement top by temp. survey @ 4050'.

Production Liner: 5 1/2"-14 & 15 1/2 # J-55 hung on Burns Hanger - packer,  
4776' - 6715', circulated cement behind and over top with  
80 sacks with 6% gel.

Tubing Program: (See attached schematic diagram dated 10/29/59.)

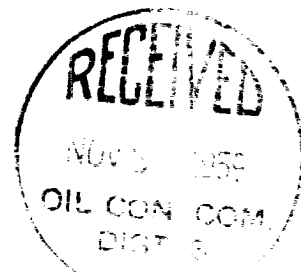
Mesa Verde: 1 1/4" @ 4482'  
Baker Model D Packer @ 4796'

Dakota: 1 1/4" @ 6217'

Logging Data: Original Welex R A Log plus new correlation Gamma Ray-  
Collar Log.

Perforating Data: (Two jets per ft.)

Mesa Verde:	4447' - 4479'	4584' - 4637'
	4492' - 4548'	4692' - 4714'
Dakota:	6612' - 6647'	6677' - 6706'
	6657' - 6673'	6712' - 6715'



Fracture Treatment:

Mesa Verde: See Completion Report dated 8/13/57.

Dakota: 50,000# (40-60 Mesh) Sand, 53,000 gals. water, 120 balls,  
32 BPM, 2600-3000 PSIG.

Potential: Indicated 1,000 MCFD during early cleanup period. Will  
be determined during packer leakage and pressure build up tests.

Other Reference: (1) Schematic diagram of dual completion hookup dated 10/29/59.  
(2) Original Completion Report dated 8/13/57.

WELL: GOV'T-STARR NO. 1-13 1185' FSL & 1495' FWL of Sec. 13,  
T31N, R13W NMPM.

FIELD: Blanco

COUNTY: San Juan STATE: New Mexico

ELEVATIONS: 5784' Gd.  
5796' KB (original)

9/28/59

Moving on cable tools in preparation for recompletion in Dakota formation.

9/29/59

Preparing to pull tubing and proceed with Dakota recompletion.

9/30/59

Sand pumping from above 7" csg bridge plugs.

Killed well and pulled tubing. Preparing to drill bridge plugs after bailing 3' of sand.

10/1/59

Attempting to drill 7" csg bridge plug with cable tools. Note considerable activity indicating leakage of Dakota gas.

10/2/59

Drlg on second 7" csg bridge plug.

Note lots of sand entry from Mesa Verde.

10/3/59

Drilling on lower 7" bridge plug. Main gear in cable tool drawworks. Now being replaced. Shut down for repairs at 11 A.M.

10-4-59

Shut down for repairs.

10-5-59

Shut down for repairs.

10/6/59

Drlg on second Baker bridge plug. Knocked loose at 11:00 P.M. on 10/5. Blew tools up hole 500'. Unloaded sand and wtr for several hrs out 4" relief line before dying off. Pulled tools out of hole. Now cutting off 500' of damaged drlg line before resumption of drlg out plug.

WELL: GOV'T-STARR NO. 1-13 Continued:

10/7/59

Shut down attempting to repair damaged drlg line.

10/8/59

Drlg on sand and iron about 50' below liner top.

10/9/59

Wtg on rig repairs. Have cleaned out to 5100'.

10/12/59

Wtg on rig repairs. Will start up this P.M.

10/13/59

Drlg on iron at 6671'. Will drill out to shoe and prepare to complete.

10/14/59

Drlg on iron and unidentified foreign material at 6671'. Running magnet intermittently to clean up iron chips.

10/15/59

Continuing to drill on iron at 6671'. Are unable to get as deep w/sand pump and bailer as with tools. Preparing to pick up tbg and clean up by rotary method.

10/16/59

Picking up tbg string w/bit to mill iron.

10/17/59

Shut down. Wtg on additional tbg.

10/18/59

Blowing wtr at 4300'.

10/19/59

Milling at 6773'. Circulating w/gas -- note iron or steel cuttings w/negligible sand.

10/20/59

Pulling tbg and milling bit. Milled and drld iron, sand and cmt to 6712' (original KB) -- this believed to be equivalent to original measurements of 5715' KB. Displaced 500 gals 15% HCL on bottom. Will perforate Dakota section -- ran and set Baker Model "D" Packer in top of liner -- ran 4½" csg to Baker Model "D" Packer and sand wtr frac.

WELL: GOV'T-STARR NO. 1-13 Continued

10/21/59

Running correlation log and perforating Dakota section. Well unloaded wtr and acid from the Dakota while pulling tbg. Allowed gas to continue blowing. Ran Gamma Ray Correlation log. Found sand had filled up to a plug-back depth of 6709'. Made run w/sand pump -- recovered considerable sand, magnesium, iron and miscellaneous junk plus some high pour point green oil in considerable quantity before logging again.

10/22/59

Present operations preparing to displace acid into Dakota perforations and sand wtr frac. Finished running Gamma Ray Correlation log. PBTD 6715½'. Perforated two dyna-jet shots per foot 6612-47', 6652-73', 6677-6706' and 6712-15'. Set model "D" Baker packer at 4796'. Estimated well was making as much as 750,000 CFPD from both the Dakota and Mesaverde and that 2/3 of the gas was shut off when setting packer which shut off Dakota. Picked up Baker stinger, seals, 1 jt of 2-7/8" tbg, and a string of 4½" csg. Ran to the top of packer. Started washing thru 4½" csg w/no returns in annulus. Washed sand off from the top of model "D" packer and set seals in same. Displaced 500 gals of acid to the top of the Dakota perforations by squeezing away wtr which was below the acid. Estimated average squeeze injection rate of 2 - 3 BPM for the wtr w/pressure of 600 - 800 psi.

10/28/59

Preparing to run completion tbg. Sand wtr fraced yesterday as follows: Started injecting at 2400 psig at 39 BPM. Began sand at 3/4# PG w/pressure increase to 2600 psig. (6 min) -- increase to 1# PG w/pressure to 2650 psig -- dropped 30 balls raising pressure to 2675 psig -- increased sand to 1½# PG w/pressure to 2700 psig -- dropped 30 balls increasing pressure to 2850 psig -- decreased sand to 1# PG -- 3/4# PG -- then 1# PG w/pressure in the range to 2850-2900 psig -- dropped 60 balls in 2 - 30 ball stages w/pressure increase to 3200 psig. Flushed at 28 BPM at 3300 psig which began increasing rapidly after 75 bbls -- estimate 25 bbls under-flush. Standing pressure 1100 psig, 800 psig in 10 min, 600 psig in 30 min. Opened well at end of 30 min and flowed back 2" stream for 40 min suddenly dropping to nothing.

Job Summary: 50,000#(40-60 mesh) sand. 53,000 gals wtr. 120 balls. 32 bbls per min. 2600-3000 psig.

Pulled 4½" csg from Baker Model "D" Packer at 4796'.

10/25/59

Blowing Dakota at 6217' KB after landing 1½" tbg at this depth. Went in w/1½" Dakota tbg string w/Baker model D seal elements -- circulated 45' of sand of top model "D" packer (previously sand pumped 15' of sand before going in w/tbg) and ran tbg to 4800' where sand bridge indicated. Blew and cleaned up from this depth -- ran wire line and found sand at 6625' KB (top of perforations 6612' KB). Had tight spot believed to be

WELL: GOV'T-STARR NO. 1-13 Continued:

10/25/59 cont'd:

sand bridge 8 tbg jts above final setting depth. Tbg landed w/approximately  $1\frac{1}{2}$ ' of seal elements remaining above packer. Did not utilize latch-down device.

10/26/59

Blowing Dakota. Released rig at midnight. Ran  $1\frac{1}{4}$ " Mesaverde tbg and landed at 4470' Gd. Dakota appears to be making 750-1000 MCFD w/wtr fog.

10/27/59

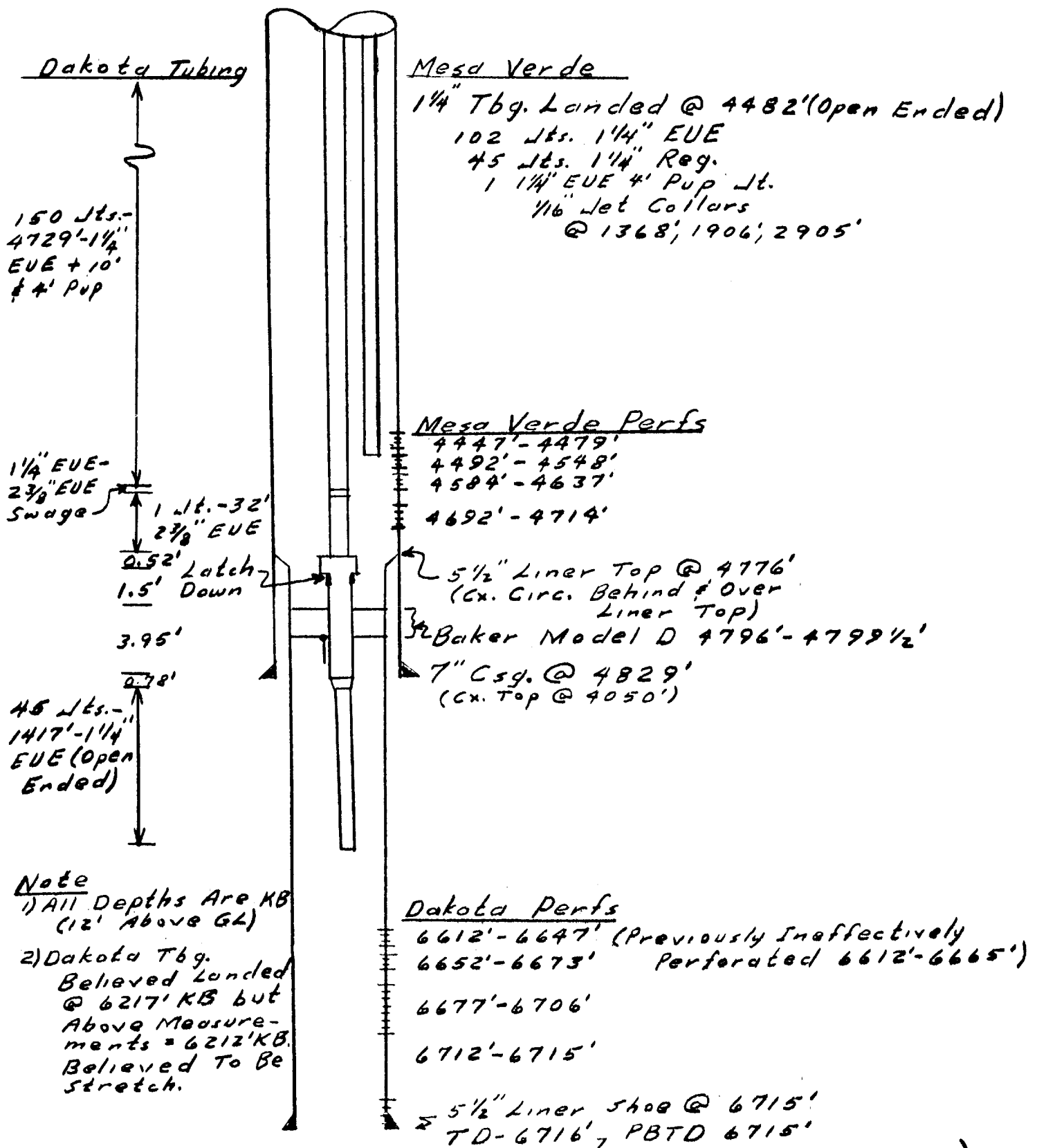
Shut in for initial 7-day pressure buildup, packer leakage testing and potential testing.

Consolidated Oil & Gas, Inc.

Gov't. - Starr No. 1-13

SW<sup>1</sup> of Sec. 13-T31N-R13W

Schematic Diagram Of Dual Completion



Note

1) All Depths Are KB  
(12' Above GL)

2) Dakota Tbg.  
Believed Landed  
@ 6217' KB but  
Above Measure-  
ments = 6212' KB.  
Believed To Be  
Stretch.

- 458 = 110-29-59)