

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

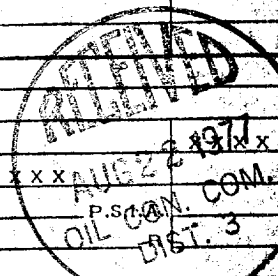
Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8-16-77	
Company CONSOLIDATED OIL & GAS CO.			Connection			
Pool			Formation Mesa Verde			
Completion Date		Total Depth		Plug Back TD 6552		
				Elevation		
				Farm or Lease Name CHAMPLIN		
Csg. Size 2.0 4.5	Wt.	d	Set At 4286 6552	Perforations: From 6270 To 6319		
Thg. Size 1.5	Wt.	d	Set At 6302	Perforations: From To		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE GAS				Packer Set At		
Producing Thru Csg				Baro. Press. - P_a 12.0		
Reservoir Temp. °F @				State N.M.		
Mean Annual Temp. °F				County Rio Arriba		
Gg L		H	Gg .650	% CO ₂	% N ₂	
				% H ₂ S	Prover X	
				Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	7-DAYS						949		1009		
1.	2 x 3/4						288		332	69	NK.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	9.452		244	0.9915	1.240	1.023	2902
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.					Specific Gravity Separator Gas	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X X X X
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R



NO.	P _t ²	P _w ²	P _c ²	P _c ² - P _w ²
1		300	90000	952441
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0945}{1.0945 - 0.0003} = 1.0945$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.0700}{1.0700 - 0.0003} = 1.0700$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3105$$

Absolute Open Flow 3105 Mcfd @ 15.025		Angle of Slope θ	Slope, n 25'
--	--	-------------------------	---------------------

Remarks:

Approved By Commission:	Conducted By: ROD GRIMES	Calculated By: NEIL TESTELLER	Checked By:
-------------------------	------------------------------------	---	-------------

DRILLING REPORT

Well Name & No. Champion 7A Date: 8-17-77
 Days: _____ Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

PUMP AND DRIG. DATA:

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

_____°@_____Ft.	Daily Mud_____	Accumulative Mud_____	HYDROCARBON SHOW DATA:
_____°@_____Ft.	Daily Water_____	Accumulative water_____	
_____°@_____Ft.	Daily Bits_____	Accumulative Bits_____	
_____°@_____Ft.	Misc._____	Accumulative Misc._____	
Total Daily_____		Accumulative Daily_____	

COST DATA:

REMARKS

1 Point test 8-16-77

<u>11: AM.</u>	<u>temp.</u>	<u>SI 949# Ca 1009#</u>
<u>11:30 AM.</u>	<u>69°</u>	<u>930 960</u>
<u>12: - Noon</u>	<u>69°</u>	<u>480 445</u>
<u>12:30 PM</u>	<u>69°</u>	<u>312 332</u>
<u>1:00 PM</u>	<u>68°</u>	<u>334 292</u>
<u>1:30 PM</u>	<u>70°</u>	<u>312 266</u>
<u>2: - PM</u>	<u>70°</u>	<u>278 246</u>
<u>2:30 PM</u>	<u>69°</u>	<u>288 232</u>

test Run by testee flowing casing

8-17-77 8AM. 17 1/2 hr SI +P 740# CP 960#
8-18-77 8AM. SI +P 760# CP 990#

DRILLING REPORT

Well Name & No. Champlin Date 8-13-77
 Days: _____ Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

PUMP AND DRLG. DATA:

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

_____ ° @ _____ Ft.	Daily Mud _____	Accumulative Mud _____
_____ ° @ _____ Ft.	Daily Water _____	Accumulative water _____
_____ ° @ _____ Ft.	Daily Bits _____	Accumulative Bits _____
_____ ° @ _____ Ft.	Misc. _____	Accumulative Misc. _____
	Total Daily _____	Accumulative Daily _____

HYDROCARBON SHOW DATA:

REMARKS

8AM: SI + P 945# CP-1000#

8-14-77 SI + P. 950# CP. - 1010#

8AM 8-15-77 SI + P 960 CP 1015#

8AM. 8-16-77 SI + P. 965# CP. 1020#
testeller will Run 1 Point # est to day.

DRILLING REPORT

Well Name & No. Champion 7A-25 Date: 8-8-77
 Days: _____ Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:
 Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

PUMP AND DRLG. DATA:
 Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:		COST DATA:		HYDROCARBON SHOW DATA:
_____ @ _____ Ft.	Daily Mud _____	Accumulative Mud _____		
_____ @ _____ Ft.	Daily Water _____	Accumulative water _____		
_____ @ _____ Ft.	Daily Bits _____	Accumulative Bits _____		
_____ @ _____ Ft.	Misc. _____	Accumulative Misc. _____		
	Total Daily _____	Accumulative Daily _____		

REMARKS

11:30 A
 F+P 375 Ca 395 Pilot tub 3 1/2" = 13.50 MCF.
 Shut well in at 11:45 AM 8-7-77 for 7 day
 Build up. 21 hrs Build up.
 8-8-77 8:45 tub. 600# Ca. 830#
 tribo C 2H = tub 1120# Ca 1120#
 Jiv C 1H = Blowing down 3H "wide again
 8-8-77 7:50 AM tub 960# Ca. 910#
 " tribo C 2H = 8:10 tub. 1155# Ca. 1135#
 8-9-77 Champ 7A-25 SI tub. 895# Ca 950#
 8-9-77 tribo C 2H-6 = SI tub. 1150# Ca. 1150#
 8-12-77 Champ 7A SI + P. 940# CP. 990#

DRILLING REPORT

8AM Report

Well Name & No. Champlin 7-A Date: 8-7-77
 Days: _____ Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: cleaning well

MUD:

PUMP AND DRLG. DATA:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

COST DATA:

HYDROCARBON SHOW DATA:

_____ ° @ _____ Ft.	Daily Mud _____	Accumulative Mud _____	_____
_____ ° @ _____ Ft.	Daily Water _____	Accumulative water _____	_____
_____ ° @ _____ Ft.	Daily Bits _____	Accumulative Bits _____	_____
_____ ° @ _____ Ft.	Misc. _____	Accumulative Misc. _____	_____
Total Daily _____		Accumulative Daily _____	_____

REMARKS

Ran 6 1/2" tubing 4' of 7ft. tagged sand at 6481
 Layed down 7ft. Landed tubing ^{with} 200 ft in hole at 6302.15B
 71ft Sand in Rat hole, Bottom Pump at 6319'
 Ran sinker Box on sand line and broke disk. Swabbed
 well in at 2:30 PM. Left well flowing throw 3/4"
 choke to Pit. Riged down at 2:30
 7:30 AM = tubing 83# casing 400# Pitot tube = 4 1/2" / 450 MCR.
 tubing not heading, Gas stream water shaterated.
 Left well flowing

trials 3A-6 tub 1115" Ca 1115"
 for CIA-11 tubing 1130 PH in hole casing 0"

DRILLING REPORT

Well Name & No. Champlin 7A Date: 8-6-77
 Days: 4 Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: Preparing to top sand + land 1 1/2 tub.

MUD:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

PUMP AND DRLG. DATA:

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

	@ _____ Ft.	Daily Mud _____	Accumulative Mud _____
		Daily Water _____	Accumulative water _____
		Daily Bits _____	Accumulative Bits _____
		Misc. _____	Accumulative Misc. _____

COST DATA:

HYDROCARBON SHOW DATA:

Total Daily _____ Accumulative Daily _____

8-5-77 7:30 AM F.P. 18 5/30 Heavy mist with small stream of water. REMARKS Reported 8-5-77

8-5-77 pickups blewil line from Tribal C-2A + haul to location and lay. Rig up to pull 2" tub. Blewil line would not hook up had to move blewil line. Re hook blewil line. opened up to blewil line. Blew gasket on Blow T. Put in new gasket. Run plug in Baker F nipple. Start pulling & laying down 2 3/8 tub. Rig up & run 200 fts 6290. Left well blowing out 2" csg valve. S.D.F.N.

(Had to run 1 1/2 disc in tub.)

(unload heavy stream of water out csg while pulling & running tub)

8-11-77 8AM. +P 920# C.P. 980#

DRILLING REPORT

Well Name & No. Champlin 7A Date: 8-5-77
 Days: 3 Depth: Ft.; Formation: ; Drilled Ft. in Hrs.
 Present Operation: Flowing well & preparing to run tub.

MUD: PUMP AND DRLG. DATA:
 Wt. lb/gal Salinity ppm Pump press.
 Visc. sec. ph Strokes
 WL cc %Oil Liner size
 FC 32nds. %Solids Jets
 LCM lb/bbl % Sand RPM
 8-4-77 8:30 AM F.L. 2500' down Wt. on bit lb
 16 hrs SIP 0% after frac.

BITS:
 Bit No. Size Make Type Footage Hrs. Depth Out

8-5-77 7:30 AM Flow press 180/530 Heavy mist
 DEVIATIONS: with stream of water 3/8" dia no sand. 9# on peto tube
 °@ Ft. Daily Mud Accumulative Mud 2190 mcf
 °@ Ft. Daily Water Accumulative water To wet to measure
 °@ Ft. Daily Bits Accumulative Bits
 °@ Ft. Misc. Accumulative Misc.
 8:00 AM Total Daily Accumulative Daily

8-5-77 1130/0
 gic CIA 1075
 Tub C 2A 1075

REMARKS

Swab & flow record

Time	F.L.	Swab	BW	T.P.	C.P.	GAS	sd	peto
9:00	2500	4000	10	0	0	0	0	0
11:00	2800	4800	40	0	0	0	0	0
2:00 PM	Scattered 3000	5800	60	0	3#	Shaw	0	0
4:00 PM	"	6150	50	0	15#	Good Shaver	0	0
5:00 PM	"	"	40	0	20#	Good Shaver	0	0
6:00 PM	Flow	2" open	40	0	30"	good	0	To wet
7:00 PM	Flow	3/4 full choke	40	60#	50#	✓	0	To wet
7:30	"	"	15"	100#	70#	2#	1020 mcf	

295

To wet To measure

7:30 AM Flow 3/4 full choke 180# 530# making good
 gas to wet for good measurement but 9# on peto
 tube = 2190 mcf P.O. Flowing heavy mist with
 small stream of water est. 140 BW in 12 hrs
 Total water est flow & swab 435 BW.

DRILLING REPORT

Well Name & No. Champlin 7A Date: 8-4-77
 Days: 2 Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:

PUMP AND DRG. DATA:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 3nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

COST DATA:

HYDROCARBON SHOW DATA:

° @ _____ Ft.	Daily Mud _____	Accumulative Mud _____	
° @ _____ Ft.	Daily Water _____	Accumulative water _____	
° @ _____ Ft.	Daily Bits _____	Accumulative Bits _____	
° @ _____ Ft.	Misc. _____	Accumulative Misc. _____	
Total Daily _____		Accumulative Daily _____	

REMARKS

8-3-77 9:00AM Western Co. pumps 100 BBI 17% K.C.L. water ahead of 1000 gal 15% H.C.L. caught fluid with 190 BBI away. Press up to 3000# @ 30 B.P.M. With acid on formation press broke to 2000# @ 30 B.P.M. With acid away slowed to 27 B.P.M. @ 1800#
 Started pad to frac. perfs 6270, 6274, 6277, 6289, 6293, 6298, 6305, 6310, 6314, 6319 total 10 perfs. Used 4000 gal of pad, 32,500 gal frac fluid plus 65,000# 20/40 sand. All pad and frac fluid contained 3% HCL, 1% K.C.L., a surfactant, iron stabilizer, a gelling agent and F.L.A. Flushed to perfs with 1% K.C.L. water and surfactant. Total load to recover 1162 BBI.

OVER

MAX press	3000 #
MIN press	450 #
A.I.P	700 #
A.I.P.	27 BPM
I.S.I.P.	0
AVG. H.P.	463

Rig up and run 1 jt 2 $\frac{3}{8}$ tub, 1 Baker
 F nipple + 182 jts of 2 $\frac{3}{8}$ tub. landed
 @ 6222" KB.

8-4-77 8:00 AM press %

DRILLING REPORT

Champlin 7A

Date: 8-3-77

Well Name & No. _____
 Days: 1 Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:

PUMP AND DRILG. DATA:

Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

BITS:

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:

COST DATA:

HYDROCARBON
SHOW DATA:

_____ ° @ _____ Ft.	Daily Mud _____	Accumulative Mud _____	_____
_____ ° @ _____ Ft.	Daily Water _____	Accumulative water _____	_____
_____ ° @ _____ Ft.	Daily Bits _____	Accumulative Bits _____	_____
_____ ° @ _____ Ft.	Misc. _____	Accumulative Misc. _____	_____
Total Daily _____		Accumulative Daily _____	_____

REMARKS

8-2-77 Move in & rig up. put BOPS
 Release Baker Returamatic full bore E packer
 & equalize. Pull tub. 184fts.
 Rig up Blue Jet & perf. 6270'
 6274 & 6277 by Formation Density log.
 (Had to move bottom perf up 1 ft from
 6278' to get out of collar in cgs.)
 Rig down Blue Jet. Rig up to
 run 2 3/8 tub SDFN.

DRILLING REPORT

Well Name & No. Champlin 7A Date: 8-3-77
 Days: 1 Depth: _____ Ft.; Formation: _____; Drilled _____ Ft. in _____ Hrs.
 Present Operation: _____

MUD:
 Wt. _____ lb/gal Salinity _____ ppm
 Visc. _____ sec. ph _____
 WL _____ cc %Oil _____
 FC _____ 32nds. %Solids _____
 LCM _____ lb/bbl % Sand _____

PUMP AND DRLG. DATA:
 Pump press. _____
 Strokes _____
 Liner size _____
 Jets _____
 RPM _____
 Wt. on bit _____ lb

Bit No.	Size	Make	Type	Footage	Hrs.	Depth Out

DEVIATIONS:		COST DATA:		HYDROCARBON SHOW DATA:
_____ °@ _____ Ft.	Daily Mud _____	Accumulative Mud _____		
_____ °@ _____ Ft.	Daily Water _____	Accumulative water _____		
_____ °@ _____ Ft.	Daily Bits _____	Accumulative Bits _____		
_____ °@ _____ Ft.	Misc. _____	Accumulative Misc. _____		
	Total Daily _____	Accumulative Daily _____		

REMARKS

8-2-77 Move in & rig up. Put BOPS
 Release Baker Retromatic full bore E packer
 & equalize. Pull tub. (~~184-5~~) 199 ft.
 Rig up Blue Jet & perf. 6278'
 6274 & 6277 by Formation Density log.
 (Had to move bottom perf up 1 ft from
 6278' to get out of collar in csg.)
 Rig down Blue Jet. Rig up to
 run 2 3/8 tub SDFN.

