ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
P. O. BOX 2088
Santa Fe, New Mexico 87501

October 23, 1981

Phillips Petroleum Co.
4001 Penbrook
Odessa, Texas 79762

Attention: Mr. T. Harold McLemore

Administrative Order TX-78

Gentlemen:

Reference is made to your request for an exception to the tubing setting requirements as contained in Division Rule 107(d)(3) for the below-named well.

Pursuant to the authority granted me by Rule 107(d)(4), you are hereby authorized to set tubing at 12,190 feet in the following well:

LEASE NAME	WELL NO.	UNIT	S-T-R
San Simon 32 State Com	1	N	32-21S-35E

The Division reserves the right to rescind this authority in the event that waste appears to be resulting therefrom.

Very truly yours,

JOE D. RAMEY,
Division Director

JDR/DSN/dr

cc: Oil Conservation Division - Hobbs
Oil & Gas Engineering Committee - Hobbs
Oil & Gas Division - State Land Office - Santa Fe

pVEV2004432081

PHILLIPS PETROLEUM COMPANY
ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production

October 19, 1981

New Mexico Department of Energy and Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico, 87501

Attention: Mr. Dan Nutter
Chief Engineer

Re: Rule 107(d) Exception
San Simon 32 A State No. 1 "Com"
Lea County, New Mexico

Gentlemen:

Confirming our conversation of October 16, 1981, the following data and exhibits are submitted in support of the request for a tubing exception under Rule 107(d) as filed by HNG Oil Company. Further, this is to advise that the jointly owned San Simon 32 A State No. 1 "Com" was drilled and completed, ready to produce, by HNG Oil Company. Phillips assumed operation of the well on September 30, 1981. T2,190 (McLemore called Dan)

Subject well bore was drilled to 13,296' with 7" production casing set at 11,096' and 4-1/2" liner set at 13,294' with the top of liner hung at 10,803'. Liner production perforations are 12,742-12,748'. 2-7/8" production tubing was set at ~~10,829~~' with a polish bore receptacle set at 10,800'. Setting the tubing and receptacle at these points allow full and complete testing of the producing zone without pulling the tubing. This type mechanical completion is expedient in completing wells in this area and zone of interest.

Forms C-105 and C-122 are attached for your review. Please note that Form C-122 reflects a hydrocarbon ratio and gravity while the Form C-105 reflects a flow test with no liquid hydrocarbon production. It is anticipated that some condensate will be produced in normal operations.

Your consideration and advice on this exception request will be appreciated.

Very truly yours,

T. Harold McLemore
Regulation and Proration Supervisor

THM:ehg
Attachments

cc: New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico, 88240
w/Attachments

RECEIVED
OCT 21 1981
O. C. D.
SANTA FE

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

Form C-105
Revised 11-1-16

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.: E-1924

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] OTHER ______

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] OTHER

7. Unit Agreement Name:

8. Farm or Lease Name: San Simon 32A State (

2. Name of Operator: HNG OIL COMPANY

9. Well No.: 1

3. Address of Operator: P. O. Box 2267, Midland, Texas 79702

10. Field and Pool, or Wildcat: East Grama Ridge Morro

4. Location of Well

UNIT LETTER N LOCATED 660 FEET FROM THE south LINE AND 1980 FEET FROM THE west LINE OF SEC. 32 TWP. 21S RGE. 35E NMPM

12. County: Lea

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
6/17/81	8/4/81	8/13/81	3641.5' GR	3641.5'

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By →	Rotary Tools	Cable Tools
13,296'	13,211'			X	

24. Producing Interval(s), of this completion — Top, Bottom, Name: 12,742' - 12,748' (Morrow)

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: CNL Density & Dual Laterolog

27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	1085'	17-1/2"	1350 Sx. Cl C	Circ.
9-5/8"	40# & 36#	5700'	12-1/4"	2650 Pacesetter Lite & 500 Cl C	Circ
7"	23#	11096'	8-3/4"	400 Pacesetter Lite & 350 Cl H	-

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4-1/2"	10,803'	13,294'	400	-

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8"	10,829'	PBR 10,800'

31. Perforation Record (Interval, size and number)

12,742' - 12,748' (.32" 14)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
12,742-12,748	300 gals spot acid.

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping – Size and type pump)	Well Status (Prod. or Shut-in)
8-13-81	Flowing	Shut-in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil – Bbl.	Gas – MCF	Water – Bbl.	Gas–Oil Ratio
8-14-81	24	7/64"		0	2000	4	0

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil – Bbl.	Gas – MCF	Water – Bbl.	Oil Gravity – API (Corr.)
4700	Packer					-

34. Disposition of Gas (Sold, used for fuel, vented, etc.): Vented

Test Witnessed By:

35. List of Attachments: Logs, and Inclination Report + C-122 w/Curve

36. *I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.*

SIGNED [signature] TITLE Regulatory Clerk

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Cherry Canyon	Marker 5866	T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	11596	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	11970	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Atoka Lime	12126	T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand	5815	T. Entrada		T.	
T. Abo		T. Bone Springs	8208	T. Wingate		T.	
T. Wolfcamp	10960	T. Rustler Anhy	1820	T. Chinle		T.	
T. Penn.	11405	T. Brushy Canyon	6485	T. Permian		T.	
T Cisco (Bough C)		T. Morrow Lime	12620	T. Penn. "A"		T.	
		Morrow Clastics	12793				

OIL OR GAS SANDS OR ZONES

No. 1, from 12,742' to 12,748' No. 4, from ____ to ____

No. 2, from ____ to ____ No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to ____ feet. ____

No. 2, from ____ to ____ feet. ____

No. 3, from ____ to ____ feet. ____

No. 4, from ____ to ____ feet. ____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	500	500	Surface rock	9371	9863	492	Lime, Shale
500	1085	585	Redbed and anhy	9863	10260	397	Shale, Lime
1085	1947	862	Shale & Sand	10260	10473	213	Shale, Lime
1947	3005	1058	Salt, Anhy	10473	10950	477	Lime, Shale
3005	3714	709	Dolomite	10950	11075	125	Shale, Lime
3714	4150	436	Dolo, Sd, Anhy	11075	11242	167	Lime
4150	4505	355	Dolo, Lime	11242	11309	67	Lime
4505	4880	375	Dolo, Lime	11309	11413	104	Lime
4880	5302	422	Dolo	11413	11627	214	Lime, Shale
5302	5670	368	Dolo	11627	11833	206	Lime
5670	6142	472	Lime, Sd	11833	11904	71	Lime
6142	6786	644	Shale & Dolo	11904	12022	118	Shale, Lime
6786	7366	580	Sd, Dolo	12022	12134	112	Shale
7366	7898	532	Sd & Sh	12134	12283	149	Lime, Shale
7898	8280	382	Sd, Lime, Shale	12283	12338	55	Shale, Lime
8280	8819	539	Lime, Shale	12338	12523	185	Lime, Shale
				12523	12714	199	Shale, Lime

FORMATION RECORD CON'D
San Simon 32A State Com., #1
Lea County, New Mexico

12714	-	12746	32	Shale, Lime
12746	-	12876	130	Chert, Lime, Shale, Sand
12876	-	13006	130	Shale
13006	-	13043	37	Shale, Lime Sand
13043	-	13184	141	Shale
13184	-	13270	86	Shale
13270	-	13296 TD	26	Shale

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8/19/81	
Company: HNG OIL COMPANY			Connection: None		
Pool: East Grama Ridge			Formation: Morrow		Unit
Completion Date: 8/13/81	Total Depth: 13,296'		Plug Back TD: 13,211'	Elevation: 3641.5'	Farm or Lease Name: San Simon 32A State Co
Csg. Size: 4-1/2" / Wt.: 15.1 / d: 3.826 / Set At: 13,294'			Perforations: From 12,742' To 12,748'		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.50 / d: 2.441 / Set At: 10,829'			Perforations: From Open Ended To		Unit: N / Sec.: 32 / Twp.: 21S / Rge.: 35E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 10,800'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 177 @ 12,745'	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12745	-	0.5998	0.292	0.697	-		6"	F

NO.	FLOW DATA: Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g. DWT	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							5600		PACKER		139.0 hrs
1.	6	4½/64	1.750	485	5	101	5262	60			1.0 hr.
2.	6	6/64	1.750	495	14	104	5065	60			0.5 hr.
3.	6	7½/64	1.750	495	30	100	4988	60			0.5 hr.
4.	6	9½/64	1.750	450	51	73	4930	60			1.0 hr.
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	14.61	49.91	498.2	0.9628	1.291	1.031	934.46
2.	14.61	84.35	508.2	0.9602	1.291	1.031	1575.00
3.	14.61	123.47	508.2	0.9636	1.291	1.032	2315.87
4.	14.61	153.70	463.2	0.9877	1.291	1.035	2963.57
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	0.74	561	1.58	0.940
2.	0.75	564	1.59	0.940
3.	0.75	560	1.58	0.939
4.	0.69	533	1.51	0.933
5.				

Gas Liquid Hydrocarbon Ratio 121.70 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 47.8 Deg.
Specific Gravity Separator Gas 0.5998 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 674 P.S.I.A. - P.S.I.A.
Critical Temperature 354 R - R

P_c 7259.2 P_c^2 52696.0

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1		6997.2	48960.8	3735.2
2		6804.2	46297.1	6398.9
3		6723.2	45201.4	7494.6
4		6360.2	40452.1	12243.9
5				

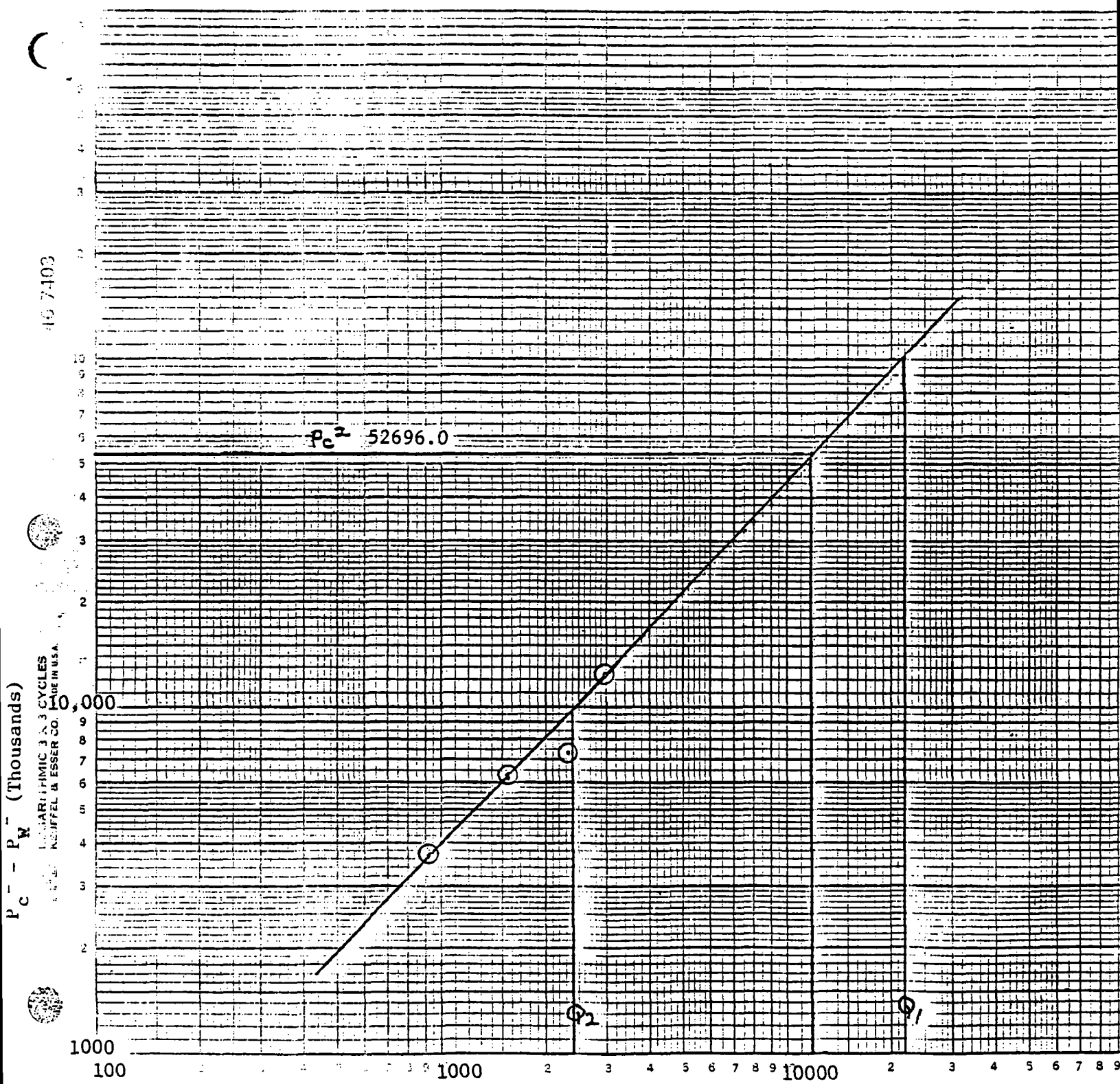
(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 14.108$ (2) $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 12.758$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 11922$

Absolute Open Flow 11922 Mcfd @ 15.025 Angle of Slope θ 46°6' Slope, n 0.962

Remarks: Bottom hole pressure @ (-9104) 12745' used for pressure calculations
2.0 BO in 3.0 hours - 16.0 BO/D

HNG OIL COMPANY
San Simon 32A State Com., Well No. 1
Sec. 32, T21S, R35E
Lea County, New Mexico



Q in Mcf/day

Q_1 = 22000 Mcf/d; LOG Q_1=4.34242
Q_2 = 2400 Mcf/d; LOG Q_2= 3.38021
n= 0.96221 = 0.962

Absolute Open Flow, 11922 Mcf/day