



## COLORADO CONSERVATION COMMISSION

## Deliverability Test

RECEIVED

TYPE TEST: ☐ Deliverability ☒ Open Flow

TEST DATE: 4-30-73

JUN 10 1973

COMPANY  
Horizon Oil & Gas Co. of TexasLEASE  
Cogburn

WELL NO. 11-21-4 Gas (Prod. Comm.)

COUNTY	LOCATION	SECTION	TWP	RNG	ACRES
Baca			21	33 S	42 W

FIELD Midway ✓ RESERVOIR Upper Morrow

PIPELINE CONNECTION  
Baca Gas Gathering System, Inc.

COMPLETION DATE PLUG BACK TOTAL DEPTH PACKER SET AT

CASING SIZE	WT.	I.D.	SET AT	PERF.	TO
5-1/2	15.5	4.950		4692	4694

TUBING SIZE	WT.	I.D.	SET AT	PERF.	TO
1-1/4	2.4	1.380	4670		

TYPE COMPLETION (Describe) TYPE FLUID PRODUCTION

PRODUCING THRU Tubing RESERVOIR TEMPERATURE F 100 BAR. PRESS - P<sub>a</sub> 14.4 PsiaGAS GRAVITY - G<sub>g</sub> .740 % CARBON DIOXIDE 0.19 % NITROGEN 16.52 API GRAVITY OF LIQUID

VERTICAL DEPTH (H) 4670 TYPE METER CONN. FLG. (METER RUN) (PROVER) SIZE 3.000

SHUT-IN PRESSURE: SHUT IN 4-27 1973 AT (AM)(PM) TAKEN 4-30 1973 AT (AM)(PM)  
FLOW TEST: STARTED 4-30 1973 AT (AM)(PM) TAKEN 5-03 1973 AT (AM)(PM)

## OBSERVED DATA

DURATION OF SHUT-IN 72 HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO WELLHEAD PRESS.			TUBING WELLHEAD PRESS.			DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia		psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia			
SHUT-IN									201.0	215.4		72	
FLOW	.375	135.0	8.0	60					135.0	149.4		72	

Pcr 638

Tcr 364

## RATE OF FLOW CALCULATIONS

COEFFICIENT (F <sub>b</sub> )(F <sub>p</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \times h_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. F <sub>t</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
.6848	149.4	34.57	1.162	1.000	1.015	28		

## (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_o)^2 = 46.4$		$(P_w)^2 = 22.3$	$P_d =$	%	$(P_o - 14.4) + 14.4 =$	$(P_a)^2 = 0.207$	$(P_d)^2 =$
$\frac{(P_o)^2 - (P_a)^2}{(P_o)^2 - (P_d)^2}$	$(P_o)^2 - (P_w)^2$	$\frac{[P_o^2 - P_a^2]}{[P_o^2 - P_d^2]}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
46.2	24.1	1.91886	.2830432	.862	.2439832	1.7538	49

OPEN FLOW

49

Mcfd @ 14.65 psia

DELIVERABILITY

Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 31 day of May, 1973

Witness (if any)

For Commission

Checked by