62

STATE OF KANSAS - CORPORATION COMMISSION

STABILIZED OPEN FLOW OR DELIVERABILITY TEST 15-175-20653-00-00

TYPE OF TEST:	INITIAL	ANNUAL	SPECIAL	TEST DATE
STATE	MULTI-POINT			03-15-83

COMPANY	LEASE	WELL NO.	ACRES
ANADARKO PROD CO	HACKER TRUST 1		640

COUNTY	LOCATION	SEC.	TWN./BLK.	RNG./SRVY.	LEASE NO.
SEWARD	SW	022	034S	034W	175-00000000

FIELD	FIELD NO.	RESERVOIR	PIPE LINE CONNECTION
HUGOTON	-	KRIDER	ANADARKO

COMPLETION DATE	TOTAL DEPTH	PLUG BACK T.D.	ELEVATION
03-20-82	2950	2919	2929

CASING SIZE 5.5000 WT. 14.00 I.D. 5.0120 SET AT: 2934 PERFORATIONS FROM 2705 TO 2766

TUBING: SIZE 2.3750 WT. 4.70 I.D. 1.9950 SET AT: 2674 PERFORATIONS FROM 0 TO 0

TYPE OF COMPLETION	PACKER SET AT	PRODUCING THRU	RESERVOIR TEMP	P_a
SINGLE GAS	0	A	094 °F AT 02736	14.4

L.	H.	G_g	% CO	% N	H_2S	PROVER	METER RUN	TAPS
2736	2736	0.660	0.07	7.95	0.0		4	FLANGE

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	(PROVER) (LINE) ORIFICE SIZE	PRESS. PSIG.	DIFF. (IN) ROOTS	TEMP. °F	PRESS. PSIG.	TEMP. °F	PRESS. PSIG.	TEMP. °F	DURATION OF FLOW HOURS
SI							180.5	60	168.0
1	4 X 1.000	121.0	2.0	60			174.3	60	0.5
2	4 X 1.000	122.0	6.0	60			163.3	60	0.5
3	4 X 1.000	123.0	11.5	60			153.2	60	0.5
4	4 X 1.000	124.0	19.0	60			135.2	60	0.5
5									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	PRESSURE PSIA	FLOW TEMPERATURE FACTOR (F_t)	GRAVITY FACTOR (F_g)	SUPER-COMP. FACTOR (F_{pv})	RATE OF FLOW Q,MCFD
1	4.8740	16.46	135.4	1.0000	1.230	1.012	100
2	4.8740	28.51	136.4	1.0000	1.230	1.012	174
3	4.8740	39.75	137.4	1.0000	1.230	1.012	241
4	4.8740	51.28	138.4	1.0000	1.230	1.012	311
5							

NO.	P_r	TEMP. R	T_r	Z	P_w	P_w^2	$P_c^2 - P_w^2$
1	0.21	520	1.45	0.977	188.7	35.6	2.4
2	0.21	520	1.45	0.977	177.7	31.6	6.4
3	0.21	520	1.45	0.977	167.6	28.1	9.9
4	0.21	520	1.45	0.977	149.6	22.4	15.6
5							

G.O.R.	0.0000 MCF/BBL	
A.P.I. Gravity	0.000 @ 60° F	
G_g	0.660	
G_m		0.660
P_{cr}	658 psia	658 psia
T_{cr}	358 R	358 R

OPEN FLOW OR DELIVERABILITY CALCULATIONS

P_c 194.9 P_c^2 38.0 P_d ______ P_d^2 ______ P_a^2 0.2

$P_c^2 - P_a^2$	$P_c^2 - P_w^2$	$\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	$\left[\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}\right]^n$	WELLHEAD OPEN FLOW	$P_c^2 - P_d^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	$\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n$	DELIVERABILITY
0.0	0.0	0.000	0.000	0				

RECEIVED
STATE CORPORATION COMMISSION

ORIG. TO CORP. COMM.
5/18/83
DATE

MAY 23 1983

CONSERVATION DIVISION
Wichita, Kansas

WELLHEAD OPEN FLOW	ANGLE OF SLOPE -0-	SLOPE, n

REMARKS:

APPROVED BY COMMISSION	CONDUCTED BY	CALCULATED BY	CHECKED BY
K Brady	DON VANGIESON	UNIVAC 1110	

12-32 4/74

STATE OF KANSAS - CORPORATION COMMISSION
STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE OF TEST:	INITIAL	ANNUAL	SPECIAL	TEST DATE
STATE				03-15-83

COMPANY	LEASE	WELL NO.	ACRES
ANADARKO PROD	HACKER TRUST A 1		640

COUNTY	LOCATION	SEC.	TWN./BLK.	RNG./SRVY.	LEASE NO.
SEWARD	C SW	022	034S	032W	175-0037435

FIELD	FIELD NO.	RESERVOIR	PIPE LINE CONNECTION
HUGOTON	-	KRIDER	ANADARKO

COMPLETION DATE	TOTAL DEPTH	PLUG BACK T.D.	ELEVATION
08-20-82	2950	2919	2929

CASING SIZE	WT.	I.D.	SET AT:	PERFORATIONS FROM	TO
5.5000	14.00	5.0120	2934	2705	2766

TUBING: SIZE	WT.	I.D.	SET AT:	PERFORATIONS FROM	TO
2.3750	4.70	1.9950	2674	0	0

TYPE OF COMPLETION	PACKER SET AT	PRODUCING THRU	RESERVOIR TEMP	P_a
SINGLE GAS	0	A	094 °F @ AT 02736	14.4

L.	H.	G_g	% CO	% N	H_2S	PROVER	METER RUN	TAPS
2736	2736	0.660	0.07	7.95	0.0		4	FLANGE

NO.	FLOW DATA (PROVER) (LINE) ORIFICE SIZE	FLOW DATA PRESS. PSIG.	FLOW DATA DIFF. (IN) ROOTS	FLOW DATA TEMP. °F	TUBING DATA PRESS. PSIG.	TUBING DATA TEMP. °F	CASING DATA PRESS. PSIG.	CASING DATA TEMP. °F	DURATION OF FLOW HOURS
SI							177.0	60	72.0
1	4 X 1.000	109.0	3.5	60			117.5	60	72.0
2									
3									
4									
5									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	PRESSURE PSIA	FLOW TEMPERATURE FACTOR (F_t)	GRAVITY FACTOR (F_g)	SUPER-COMP. FACTOR (F_{pv})	RATE OF FLOW Q,MCFD
1	4.8740	20.78	123.4	1.0000	1.230	1.010	126
2							
3							
4							
5							

RECEIVED
STATE CORPORATION COMMISSION
MAY 23 1983
CONSERVATION DIVISION
Wichita, Kansas

NO.	P_r	TEMP. R	T_r	Z	P_w	P_w^2	$P_c^2 - P_w^2$
1	0.19	520	1.45	0.980	131.9	17398.0	19236.0
2							
3							
4							
5							

G.O.R.	0.0000	MCF/BBL
	0.000	@ 60° F
G_g	0.660	
G_m		0.660
P_{cr}	658 psia	658 psia
T_{cr}	358 R	358 R

OPEN FLOW OR DELIVERABILITY CALCULATIONS

P_c 191.4 P_c^2 36634.0 P_d 133.0 P_d^2 17689.0 P_a^2 207.0

$P_c^2 - P_a^2$	$P_c^2 - P_w^2$	$\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	$\left[\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}\right]^n$	WELLHEAD OPEN FLOW	$P_c^2 - P_d^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	$\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n$	DELIVERABILITY
36427.0	19236.0	1.894	1.721	217	18945.0	0.985	0.987	124

ORIG. TO CONS. COMM.
5/19/83
DATE

WELLHEAD OPEN FLOW	217	ANGLE OF SLOPE θ	49 DEG 38 MIN	SLOPE, n	0.850

REMARKS:

APPROVED BY COMMISSION	CONDUCTED BY	CALCULATED BY	CHECKED BY
K Beaken	DON VANGIESON	UNIVAC 1110	

12-32 4/74