STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 4/2/82	
Company: Hexagon Oil & Gas Inc.		Connection			
Pool: Maljamer		Formation: Atoka			Unit
Completion Date: 1/21/82	Total Depth: 13848'		Plug Back TD: 13780'	Elevation: 4207'GL	Farm or Lease Name: New Mex. 28 State
Csg. Size: 4½" / Wt.: 11.6 / d: 3.875 / Set At: 13848'			Perforations: From 13038' To 13055'		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 13000'			Perforations: From Open Ended To		Unit: I / Sec.: 28 / Twp.: 16s / Rge.: 33e
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 13000'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 180° @ 13055'		Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico
L: 13055'	H: –	Gg: 0.6757	% CO_2: 0.466	% N_2: 0.916	% H_2S: –
Prover: 2"	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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI						4030				72.0 hrs
1	2"	4/64 1/8	520	–	77	3355		PACKER		1.0 hr
2	2"	5.5/64 3/16	300	–	80	2710				1.0 hr
3	2"	8.5/64 7/32	295	–	81	1940				1.0 hr
4	2"	11.5/64 1/4	300	–	75	1408				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	0.2648	–	533.2	0.9840	1.217	1.052	177.87
2	0.6082	–	313.2	0.9813	1.217	1.029	234.09
3	0.8393	–	308.2	0.9804	1.217	1.029	317.58
4	1.087	–	313.2	0.9859	1.217	1.030	420.74
5							

NO	P_t	Temp. °R	T_f	Z
1	0.79	537	1.42	0.904
2	0.47	540	1.43	0.944
3	0.46	541	1.43	0.945
4	0.47	535	1.42	0.943
5				

Gas Liquid Hydrocarbon Ratio: 65.832 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 56 Deg.
Specific Gravity Separator Gas: 0.6757 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. – P.S.I.A.
Critical Temperature: 378 R – R

P_c 6446.2 P_c^2 41533.5

NO	P_t	P_w*	P_w^2	$P_c^2 - P_w^2$
1		5674.2	32196.5	9357.0
2		5287.2	27954.5	13599.0
3		4422.2	19555.9	21997.6
4		3179.2	10107.3	31446.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.321$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.217$

AOF = $Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 512$

Absolute Open Flow: 512 Mcfd @ 15.025
Angle of Slope θ: 54°51'
Slope, n: 0.704

Remarks: * BOTTOM HOLE PRESSURE @ (-8848)13055' USED FOR PRESSURE CALCULATIONS
WELL PRODUCED 0.73BD IN 4.0 HOURS = 4.38 BD/D

Approved By Division	Conducted By:	Calculated By:	Checked By:
	ARREL WELL TESTING, INC	Joe A. Coleman	PE #2208 Joe A. Coleman

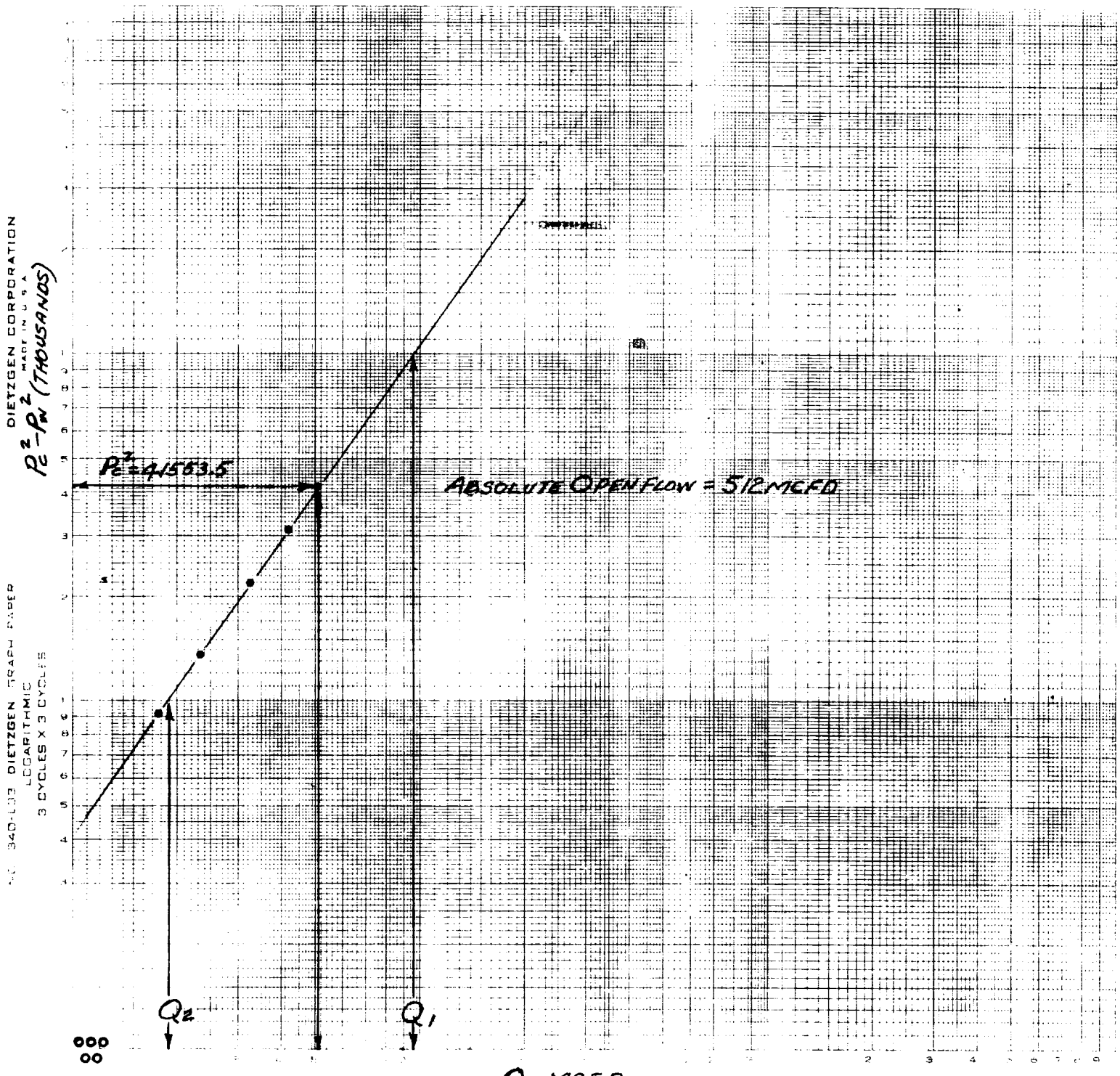
COMPANY: Hexagon Oil & [illegible], Inc.

WELL: New Mexico 28 State, No. 1

LOCATION: I 28 16s 33e

COUNTY: Lea

DATE: April 2, 1982



$Q_1 = 960$ MCFD; LOG $Q_1 = 2.98227$

$Q_2 = 190$ MCFD; LOG $Q_2 = 2.27875$

$n = 0.70352 = 0.704$

NEW-TEX LAB
P. O. BOX 1161
HOBBS NM 88241-1161
505-393-3561

ANALYSIS NUMBER: 7074
DATE OF RUN: 4 3 82
DATE SECURED: 4 2 82

ANALYSIS CERTIFICATE

SAMPLE IDENT: HEXAGON OIL & GAS INC - 2F STATE #1

CLIENT: JARREL WELL TESTING INC
ADDRESS: BOX 1457
CITY, STATE: HOBBS NM 88240

SAMPLING PRESS: SAMPLING TEMP:

********** GAS ANALYSIS **********

	MOLE PERCENT	GAL/ MCF
NITROGEN	0.915	
CARBON DIOXIDE	0.466	
METHANE	83.571	
ETHANE	9.453	2.532
PROPANE	3.741	1.027
ISO-BUTANE	0.446	0.146
NORMAL BUTANE	0.792	0.246
ISO-PENTANE	0.194	0.071
NORMAL PENTANE	0.174	0.063
HEXANES	0.098	0.040
HEPTANES PLUS	0.157	0.072
TOTAL	100.000	4.187

PROPANE GPM: 1.03 BUTANES GPM: 0.39
ETHANE GPM: 2.52 PENTANES PLUS GPM: 0.25

SPECIFIC GRAV (CALC): 0.6757
MOLE WEIGHT: 19.58

HHV-BTU/CU FT PRESSURE (PSIA)	WET	DRY
14.696	1153	1174
14.650	1150	1170
14.730	1156	1176
14.735	1156	1177

ANALYZED BY: DEANE SIMPSON APPROVED BY: Deane Simpson

JARREL SERVICES, INC.

POST OFFICE BOX 1654 PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

COMPANY: Hexagon Oil & Gas, Inc.

WELL: New Mexico 28 State, No. 1 FIELD: Maljamer Atoka

CHRONOLOGICAL PRESSURE DATA

DATE	STATUS OF WELL	TIME	ELASPED TIME HRS.	ELASPED TIME MIN.	SURFACE PRESSURE TBG	SURFACE PRESSURE CSG		BHP @ (-8848) 13055'PSIG
1982								
4/2	Shut in 72.0 hrs. Run Static Gradient in/Tandem Bombs & hung Bombs @ 13055'	11:30 AM	-	-	4030 DWT	PKR		6433
	Started 1st Rate	12:00 N	0	30	4030	-	MCF/D	6433
	Finished 1st Rate & Started 2nd Rate	1:00 PM	1	00	3355	-	177.87	5661
	Finished 2nd Rate & Started 3rd Rate	2:00	1	00	2710	-	234.09	5274
	Finished 3rd Rate & Started 4th Rate	3:00	1	00	1940	-	317.58	4409
	Finished 4th Rate & Pulled Bombs	4:00	1	00	1408	-	420.74	3166