

NEW MEXICO OIL CONSERVATION COMMISSION
INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
 Revised 1-1-66

POOL NAME Ballard PC	POOL SLOPE n = .85	FORMATION Pictured Cliffs	COUNTY Rio Arriba
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COMPANY Thomas A. Dugan			WELL NAME AND NUMBER Harris #5		
UNIT LETTER 0	SECTION 21	TOWNSHIP 24N	RANGE 5W	PURCHASING PIPELINE EPNG Co.	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
GAS PAY ZONE FROM TO		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY	GRAVITY X LENGTH
DATE OF FLOW TEST FROM 12/20/69 TO 12/28/69			DATE SHUT-IN PRESSURE MEASURED 6/21/60		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a - c) or (b - c)	(g) Average Meter Pressure (Integr.) 157
(h) Corrected Meter Pressure (g + e) 157	(i) Avg. Wellhead Press. $P_t = (h + f)$ 157	(j) Shut-in Casing Pressure (DWt) 456	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k) 456	(m) Del. Pressure $P_d = \frac{80}{365} \% P_c$ 365	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1.6248 2	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume $Q = \frac{1.6248}{2} \text{ MCF/D}$
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
	$P_t = P_w$	Friction Negligible			

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1.6248}{2} \left[\frac{74,711}{183,287} \right]^n \left(\frac{.4076}{.4663} \right)^n \frac{.85}{.4663} = \frac{.75764424}{1} \text{ MCF/D}$
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REMARKS:

SUMMARY

Item h **157** Psia
 P_c **456** Psia
 Q **~~1.6248~~ 2** MCF/D
 P_w **157** Psia
 P_d **365** Psia
 D **~~.75764424~~ 1** MCF/D

Company **Thomas A. Dugan**
 By **Jim L. Jacobs**
 Title **Agent**
 Witnessed By _____
 Company _____

