

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**INITIAL WELL DELIVERABILITY TEST REPORT FOR 1970**

Form C122-A  
Revised 1-1-66

POOL NAME <b>Basin</b>	POOL SLOPE n = <b>.75</b>	FORMATION <b>Dakota</b>	COUNTY <b>Rio Arriba</b>
---------------------------	------------------------------	----------------------------	-----------------------------

COMPANY <b>Jerome P. McHugh</b>			WELL NAME AND NUMBER <b>Apache #8</b>		
UNIT LETTER <b>B</b>	SECTION <b>20</b>	TOWNSHIP <b>26N</b>	RANGE <b>3W</b>	PURCHASING PIPELINE <b>EPNG Co.</b>	
CASING O.D. - INCHES <b>4 1/2"</b>	CASING I.D. - INCHES	SET AT DEPTH - FEET <b>8354'</b>	TUBING O.D. - INCHES <b>1.660</b>	TUBING I.D. - INCHES <b>1.380</b>	TOP - TUBING PERF. - FEET <b>8282'</b>
GAS PAY ZONE FROM <b>8130'</b> TO <b>8312'</b>		WELL PRODUCING THRU CASING TUBING <b>X</b>		GAS GRAVITY <b>.678</b>	GRAVITY X LENGTH
DATE OF FLOW TEST FROM <b>4-3/70</b> TO <b>4/10/70</b>			DATE SHUT-IN PRESSURE MEASURED <b>2-25-70</b>		

**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.) <b>309</b>
(h) Corrected Meter Pressure (g + e) <b>309</b>	(i) Avg. Wellhead Press. $P_t = (h + f)$ <b>309</b>	(j) Shut-in Casing Pressure (DWt) <b>---</b>	(k) Shut-in Tubing Pressure (DWt) <b>950</b>	(l) $P_c$ = higher value of (j) or (k) <b>950</b>	(m) Del. Pressure $P_d = 50$ % $P_c$ <b>475</b>	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

**FLOW RATE CORRECTION (METER ERROR)**

Integrated Volume - MCF/D <b>18</b>	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume Q = <b>18</b> MCF/D
--	---	--	---

**WORKING PRESSURE CALCULATION**

$(1 - e^{-s})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$	$P_t^2$	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
<b><math>P_t = P_w</math> - friction negligible</b>					

**DELIVERABILITY CALCULATION**

$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	<b>18</b>	$\left[ \frac{676,875}{807,019} \right]^n =$	$(.8387)^n =$	$.75$	$.8764$	$=$	<b>16</b> MCF/D
--	-----------	--	---------------	-------	---------	-----	-----------------

REMARKS:

**SUMMARY**

Item h **309** Psia  
 $P_c$  **950** Psia  
 Q **18** MCF/D  
 $P_w$  **309** Psia  
 $P_d$  **475** Psia  
 D **16** MCF/D

Company **Jerome P. McHugh**  
 By **John L. Jacob**  
 Title **Agent**  
 Witnessed By \_\_\_\_\_  
 Company \_\_\_\_\_



27



