

NEW MEXICO OIL CONSERVATION COMMISSION
INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 67

Form C122-A
 Revised 1-1-66

POOL NAME Basin	POOL SLOPE $n = .75$	FORMATION Dakota	COUNTY San Juan
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COMPANY Rock Island Oil & Refining Co., Inc.			WELL NAME AND NUMBER Howell #1		
UNIT LETTER M	SECTION 3	TOWNSHIP 30N	RANGE 8W	PURCHASING PIPELINE EPNG	
CASING O.D. - INCHES 4,500	CASING I.D. - INCHES 4,000	SET AT DEPTH - FEET 7687'	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7461
GAS PAY ZONE FROM 7455 TO 7650		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5059
DATE OF FLOW TEST FROM 6-1-67 TO 6-9-67			DATE SHUT-IN PRESSURE MEASURED 1-4-67		

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.) 507
(h) Corrected Meter Pressure (g + e) 507	(i) Avg. Wellhead Press. $P_t = (h + f)$ 507	(j) Shut-in Casing Pressure (DWt) 2323	(k) Shut-in Tubing Pressure (DWt) 2425 2324	(l) P_c = higher value of (j) or (k) 2324	(m) Del. Pressure $P_d = .50$ % P_c 1162	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 2588	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.000	Corrected Volume $Q = 2588$ MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.308	$(F_c Q_m)^2 (1000)$ 592,046	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 182,350	P_t^2 257,049	$P_w^2 = P_t^2 + R^2$ 439,399	$P_w = \sqrt{P_w^2}$ 663
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$ 2588	$\left[\frac{4,050,732}{4,961,577} \right]^n =$.8164	$=$.8588	$=$ 2223 MCF/D
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REMARKS:

SUMMARY

Item h **507** Psia
 P_c **2324** Psia
 Q **2588** MCF/D
 P_w **663** Psia
 P_d **1162** Psia
 D **2223** MCF/D

Company **Rock Island Oil & Refining Co., Inc.**
 By **T. D. Ables**
 Title **T. D. Ables, General Superintendent**
 Witnessed By _____
 Company **Rock Island Oil & Refining Co., Inc.**

