

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

Form C122-A
 Revised 1-1-66

POOL NAME BASIN DAKOTA	POOL SLOPE n = .75	FORMATION DAKOTA	COUNTY SAN JUAN
----------------------------------	------------------------------	----------------------------	---------------------------

COMPANY BETA DEVELOPMENT CO.			WELL NAME AND NUMBER MUDGE FEDERAL #4		
UNIT LETTER D	SECTION 33	TOWNSHIP 27 North	RANGE 11 West	PURCHASING PIPELINE EPNG Co.	
CASING O.D. - INCHES 2.875	CASING I.D. - INCHES 2.441	SET AT DEPTH - FEET 6256	TUBING O.D. - INCHES 1.566	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 6419
GAS PAY ZONE FROM 6364 TO 6421		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .705	GRAVITY X LENGTH 4525
DATE OF FLOW TEST FROM 3-4-69 TO 3-12-69			DATE SHUT-IN PRESSURE MEASURED 1968 Annual S.I. Used		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 501	(b) Flowing Tubing Pressure (DWt) 440	(c) Flowing Meter Pressure (DWt) 424	(d) Flow Chart Static Reading 425	(e) Meter Error (Item c - Item d) - 1	(f) Friction Loss (a - c) or (b - c) 16	(g) Average Meter Pressure (Integr.) 385
(h) Corrected Meter Pressure (g + e) 384	(i) Avg. Wellhead Press. $P_t = (h + f)$ 400	(j) Shut-in Casing Pressure (DWt) 795	(k) Shut-in Tubing Pressure (DWt) 786	(l) P_c = higher value of (j) or (k) 795	(m) Del. Pressure $P_d = \frac{50}{398} \% P$ 398	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 561	Quotient of $\frac{\text{Item c}}{\text{Item d}}$.9976	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$.9988	Corrected Volume Q = 560 MCF/D
---	---	--	--

WORKING PRESSURE CALCULATION

$(1 - e^{-s})$.280	$(F_c Q_m)^2 (1000)$ 84,964	$R^2 = (1 - e^{-s}) (F_c Q_m)^2 (1000)$ 23,790	P_t^2 160,000	$P_w^2 = P_t^2 + R^2$ 183,790	$P_w = \sqrt{P_w^2}$ 429
-------------------------------	---------------------------------------	--	---------------------------	---	------------------------------------

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	560	$\left[\frac{473,621}{448,235} \right]^n =$	$\frac{1.0566}{1.0423} =$	584 MCF/D
--	------------	--	---------------------------	------------------

REMARKS:

SUMMARY	
Item h	384 Psia
P_c	795 Psia
Q	560 MCF/D
P_w	429 Psia
P_d	398 Psia
D	584 MCF/D

49



Company Beta Development Co.
 By J. C. Dean
 Title _____
 Witnessed By _____
 Company _____

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11

11. 11. 11