

MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 1982

Form C122-A
 Revised 8-77

RPT, #A61
 PAGE 602

WELL NAME IN	POOL SLOPE 75	FORMATION DAKOTA	COUNTY SJ
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93-291

COMPANY MESA PETROLEUM CO			WELL NAME AND NUMBER STATE COM AK #35E		
INITIAL LETTER P	SECTION 36	TOWNSHIP 32	RANGE 12	PURCHASING PIPELINE EL PASO NATURAL GAS CO	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7694	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP TUBING PERF. - FEET 7377
GAS PAY ZONE FROM 7407 TO 7630		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY 0.614	GRAVITY X LENGTH 4529
DATE OF FLOW TEST FROM 05/05/82 TO 05/13/82			DATE SHUT-IN PRESSURE MEASURED 05/20/82		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI)	(b) Flowing Tubing Pressure (DWI)	(c) Flowing Meter Pressure (DWI)	(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.)
652	377	377	374	3	0	371
(h) Corrected Meter Pressure (g+e)	(i) Avg. Wellhead Press. $P_i = (h+f)$	(j) Shut-in Casing Pressure (DWI)	(k) Shut-in Tubing Pressure (DWI)	(l) P_c = higher value of (i) or (k)	(m) Del. Pressure $p_d = 50\%$	(n) Separator or Dehydrator Pr. (DWI) for critical flow only
374	374	812	812	812	406	

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
289	1.0080	1.0040	Q = 290 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-3})$	$(F_c Q_m)^2 (1000)$	$(1-e^{-3}) (F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.281	7,437	2090	139876	141966	377

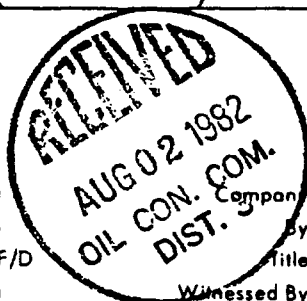
DELIVERABILITY CALCULATION

$Q = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_n^2} \right]^n =$	290	$\left(\frac{494508}{517378} \right)^n =$	$\left(0.9558 \right)^n =$	0.9667	$=$	280 MCF/D
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REMARKS:

SUMMARY

Item h	374	Psia
P_c	812	Psia
Q	290	MCF/D
P_w	377	Psia
P_d	406	Psia
D	280	MCF/D



MESA PETROLEUM CO

Witnessed By
 Company

RECEIVED

MAY 17 1984

Amarillo Production

14/82

10571 93-291

BEFORE EXAMINER STAMETS
 OIL CONSERVATION DIVISION

MESA EXHIBIT NO. 3

CASE NO. 8298

Submitted by Houston

Hearing Date 8-8-84

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 1982 82

Form C122-A
Revised 8-77

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY San Juan
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93-291-01

COMPANY Mesa Petroleum Co			WELL NAME AND NUMBER State Com AK # 35E		
UNIT LETTER P	SECTION 36	TOWNSHIP 32	RANGE 12	PURCHASING PIPELINE El Paso Natural Gas	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7694	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP TUBING PERF. - FEET 7377
GAS PAY ZONE FROM 7407 TO 7630		WELL PRODUCING THRU CASING TUBING XXX		GAS GRAVITY .614	GRAVITY X LENGTH 4529
DATE OF FLOW TEST FROM 10-20-83 TO 10-28-83			DATE SHUT-IN PRESSURE MEASURED 11-04-83		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI) 612	(b) Flowing Tubing Pressure (DWI) 462	(c) Flowing Meter Pressure (DWI) 316	(d) Flow Chart Static Reading 316	(e) Meter Error (Item c - Item d) 0	(f) Friction Loss (a-c) or (b-c) 146	(g) Average Meter Pressure (Integr.) 319
(h) Corrected Meter Pressure (g+e) 319	(i) Avg. Wellhead Press. $P_i = (h+f)$ 465	(j) Shut-in Casing Pressure (DWI) 1112	(k) Shut-in Tubing Pressure (DWI) 1112	(l) P_c = higher value of (i) or (k) 1112	(m) Del. Pressure $P_d = .50 \times P_c$ 556	(n) Separator or Dehydrator Pr. (DWI) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 985	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.000	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.000	Corrected Volume Q = 985 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-2})$ 0.281	$(F_c Q_m)^2 (1000)$ 85766	$R^2 = (1-e^{-2}) (F_c Q_m)^2 (1000)$ 24100	P_i^2 216225	$P_w^2 = P_i^2 + R^2$ 240325	$P_w = \sqrt{P_w^2}$ 490
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DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n$ 985	$\left(\frac{927408}{996219} \right)^n = \left(.9309 \right)^n = .9477$	= 934 MCF/D
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REMARKS:

SUMMARY

Item h	319	Psia
P_c	1112	Psia
Q	985	MCF/D
P_w	490	Psia
P_d	556	Psia
D	934	MCF/D

Company Mesa Petroleum Co

By [Signature]

Title [Signature]

Witnessed By [Signature]

Company [Signature]

MAY 07 1984

Amarillo Production

OIL CON DIV

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 19 83

Form C122-A
 Revised 8-77

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY San Juan
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93-291

COMPANY Mesa Petroleum Company			WELL NAME AND NUMBER State Com AK #35E		
UNIT LETTER P	SECTION 36	TOWNSHIP 32	RANGE 12	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7694	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7377
GAS PAY ZONE FROM 7407 TO 7630		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .614	GRAVITY X LENGTH 4529
DATE OF FLOW TEST FROM 01-20-84 TO 01-28-84			DATE SHUT-IN PRESSURE MEASURED 02-04-84		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI)	(b) Flowing Tubing Pressure (DWI)	(c) Flowing Meter Pressure (DWI)	(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.)
472	352	342	338	4	10	322
(h) Corrected Meter Pressure (g+e)	(i) Avg. Wellhead Press. $P_1 = (h+f)$	(j) Shut-in Casing Pressure (DWI)	(k) Shut-in Tubing Pressure (DWI)	(l) P_c = higher value of (i) or (k)	(m) Del. Pressure $P_d = \frac{.50}{506} \% P_c$	(n) Separator or Dehydrator Pr. (DWI) for critical flow only
326	336	1012	1012	1012		

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
941	1.0118	1.0059	Q = 947 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-3})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-3}) (F_c Q_m)^2 (1000)$	P_1^2	$P_w^2 = P_1^2 + R^2$	$P_w = \sqrt{P_w^2}$
0.281	79276	22276	112896	135172	368

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	947	$\left(\frac{768108}{888972} \right)^n =$	.8640	$=$	.8962	$=$	849 MCF/D
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REMARKS:

SUMMARY

Item h	326	Psia	Company	Mesa Petroleum Company
P_c	1012	Psia	By	
Q	947	MCF/D	Title	
P_w	368	Psia	Witnessed By	
P_d	506	Psia	Company	
D	849	MCF/D		

MAY 07 1984

Amarillo Production

DEPT. RE EXAMINER T. J. WILTS
OIL CONSERVATION DIVISION

MESA EXHIBIT NO. 3

CASE NO. 8298

Submitted by Houston

Hearing Date 8-8-84