

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE:	
COMPANY McCoy Petroleum Corporation		LEASE Schmidt	
COUNTY Haskell		WELL NO. D #1-29	
LOCATION W/2 SW SE	SECTION 29	TWP 30s 31	RNG ACRES
FIELD Lette South	RESERVOIR Morrow Atoka	PIPELINE CONNECTION Regency	
COMPLETION DATE 11/5/04	PLUG BACK DEPTH 5550	PACKER SET AT 5293	
CASING SIZE 4.500	WT. 10.500	ID 4.052	SET AT 5735
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 6261
TYPE COMPLETION (Describe) perforations		TYPE FLUID PRODUCTION oil-water	
PRODUCING THRU (Annulus/Tubing) tubing		RESERVOIR TEMPERATURE F 132	BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .696	% CARBON DIOXIDE .130	% NITROGEN 10.487	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 5344	TYPE METER CONN. Flange		METER RUN SIZE 4.052
REMARKS			

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w) (P _t) (P _c) psia	psig	(P _w) (P _t) (P _c) psia		
SHUT-IN						550	564	550	564	72.00	
1.	1.500	74.00	4.00	77		522	536	489	503	1.00	
2.	1.500	75.00	5.00	76		496	510	410	424	1.00	
3.	1.500	76.00	8.00	77		472	486	315	329	1.00	
4.	1.500	77.50	12.00	76		439	453	252	266	1.00	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW Q Mcfd	GOR	G _m
1.	11.410	88.4	18.80	1.1987	.9840	1.0071	254		.696
2.	11.410	89.4	21.14	1.1987	.9850	1.0072	286		.696
3.	11.410	90.4	26.89	1.1987	.9840	1.0072	364		.696
4.	11.410	91.9	33.21	1.1987	.9850	1.0074	450		.696

PRESSURE CALCULATION

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² Thousands	(P _w) ² Thousands	PLOTING POINTS		% SHUT-IN 100 $\left[\frac{P_w - P_a}{P_c - P_a} \right]$
						(P _c) ² - (P _w) ² Thousands	Q Mcfd	
1.	503.4	564.4	536.4	318.5	287.7	30.8	254.9	94.9
2.	424.4	564.4	510.4	318.5	260.5	58.0	286.9	90.2
3.	329.4	564.4	486.4	318.5	236.6	82.0	364.5	85.8
4.	266.4	564.4	453.4	318.5	205.6	113.0	450.7	79.8

INDICATED WELLHEAD OPEN FLOW

912

Mcfd @ 14.65 psia

"n" = .678

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein and that said report is true and correct. Executed this the 20 day of Sept, 2005

Witness (if any)

For Company

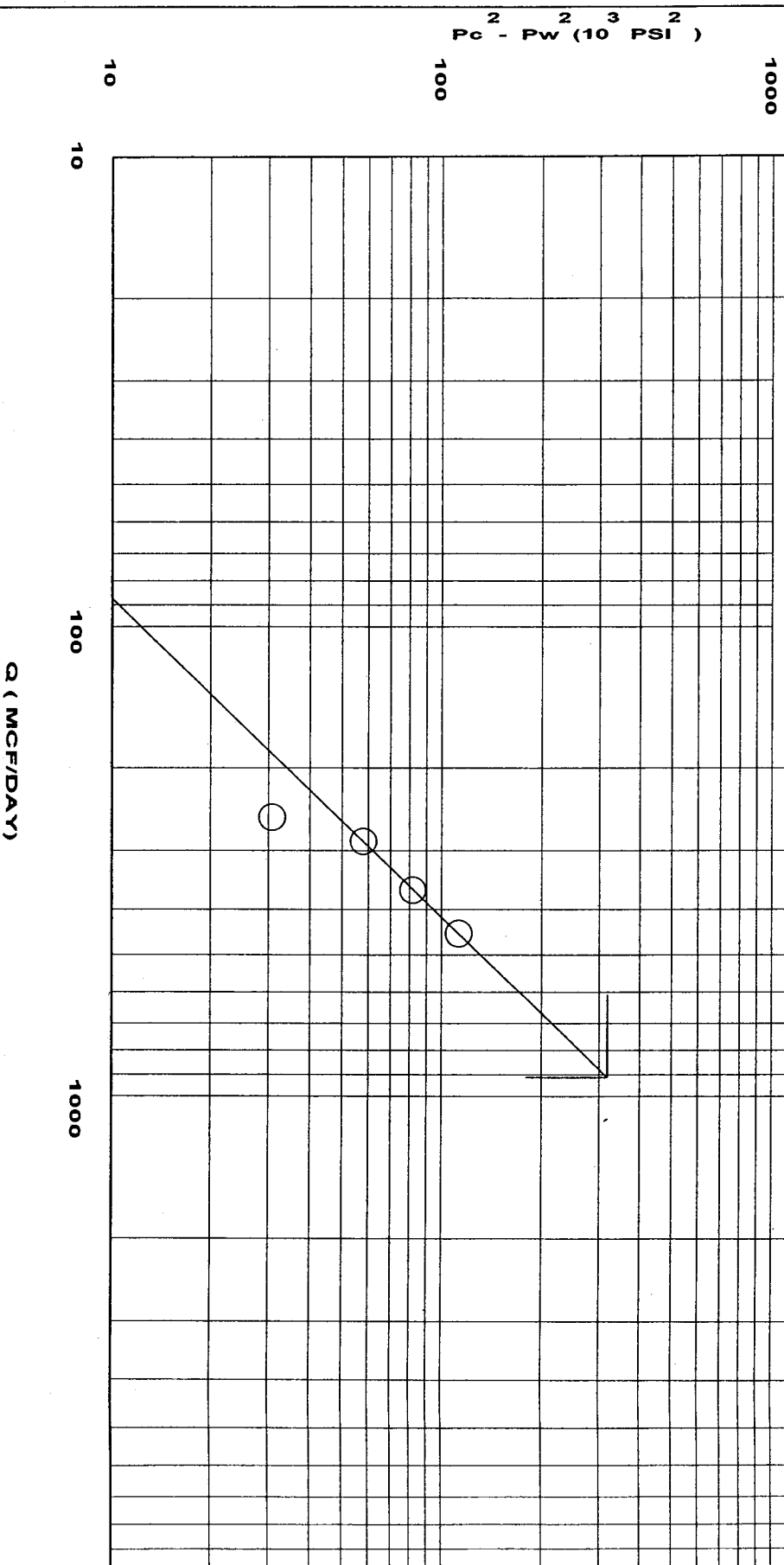
For Commission

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Trilobite Testing
TEST DATE:

McCoy Petroleum Corporation
Schmidt D #1-29
29 30s 31w
Haskell
Exponent n: 0.6785
AOFF: 912.



KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
(Rev.8/98)

TYPE TEST:

- ☒ Open Flow
☒ Deliverability

TEST DATE: 9/17/05 API No. 15-081-21533

Company McCoy Petroleum Corporation		Lease Schmidt		Well Number D #1-29	
County Haskell	Location W/2 SW SE	Section 29	TWP 30s	RNG (E/W) 31	Acres Attributed
Field Lette South	Reservoir Morrow <i>Atholka</i>	Gas Gathering Connection Regency			
Completion Date 11/5/04	Plug Back Total Depth 5550	Packer Set at 5293			
Casing Size 4.500	Weight 10.500	Internal Diameter 4.052	Set at 5735	Perforations 5186	To 5267
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 6261	Perforations	To
Type Completion (Describe) perforations	Type Fluid Production oil-water	Pump Unit or Traveling Plunger? no			
Producing Thru (Annulus/Tubing) tubing	% Carbon Dioxide .130	% Nitrogen 10.487		Gas Gravity- Gg .696	
Vertical Depth (ft) 5344	Pressure Taps Flange	Meter Run Size 3.068			
Pressure Buildup: Shut in	9-13-05 @ 9:00	TAKEN	9-16-05 @ 11:15		
Well on Line: Started	9-16-05 @ 11:15	TAKEN	9-17-05 @ 14:55		

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H ₂ O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P _w) (P _t) (P _c)		Tubing WellHead Press. (P _w) (P _t) (P _c)		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						550	564	550	564	72.0	
Flow	1.500	70.0	5.00	93		427	441	245	259	24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G _m
11.410	84.4	20.54	1.1987	.9697	1.0061	274		.696

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P _c) ² = 318.5		(P _w) ² = 194.8		Pd = 12.4		% (P _c - 14.4) + 14.4 =		(Pa) ² = 0.207
(P _c) ² - (P _a) ²		(P _c) ² - (P _w) ²		LOG		n x LOG		(Pd) ² = 4.90
or (P _c) ² - (P _d) ²		$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$		Backpressure Curve Slope "n" ----- or ----- Assigned Standard Slope		Antilog		Open Flow Deliverability = R x Antilog Mcfd
318.34		123.71		2.573		.4105		.678
313.65		123.71		2.535		.4040		.678
								.2783
								.2739
								1.898
								1.879
								520
								515

OPEN FLOW 520 Mcfd @ 14.65 psia DELIVERABILITY 515 Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein and that said report is true and correct. Executed this the 20 day of Sept, 2005

Witness (if any)

For Commission

For Company

Checked by

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, Inc.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 785-625-5620

Analyzed by:
 Caraway Analytical, Inc
 P. O. Box 2137
 Liberal, Kansas 67905
 Phone: 620-624-5389
 Fax: 620-626-7108

Lab Number: 20054474
 Sample From: Schmidt D 1-29
 Producer: McCoy Petroleum
 Date:
 Time:
 Sampler:
 Source:

Analyzed: 09/15/05
 Pressure:
 Temperature:
 Location:
 County: Haskell
 State: Kansas
 Formation:

		Mole %	GPM
Helium	He:	0.197	0.000
Hydrogen	H2:	0.006	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	10.487	0.000
Carbon Dioxide	CO2:	0.130	0.000
Methane	C1:	77.708	0.000
Ethane	C2:	5.908	1.580
Propane	C3:	3.762	1.037
Iso Butane	iC4:	0.411	0.134
Normal Butane	nC4:	0.799	0.252
Iso Pentane	iC5:	0.160	0.059
Normal Pentane	nC5:	0.181	0.066
Hexanes Plus	C6+:	0.251	0.110

TOTAL: 100.000 3.237
 Z Fact: 0.9975
 SP.GR.: 0.6956
 BTU (SAT): 1036.7 @ 14.73 psia
 BTU (DRY): 1055.1 @ 14.73 psia
 OCTANE RATING: 112.2

COMMENTS:

0.000

McCoy Petroleum Corp
29 30s 31w Haskell co KS

Start Test Date: 2005/09/16
Final Test Date: 2005/09/17

Schmidt D 1-29

FieldNotes

Field Measurements

Date	Clock Time	Comments	Tubing		Casing		Diff1		Meter1		Static1		Orifice1		Gas1		Cum.
			Pres	psi(g)	Pres	psi(g)	Pres	in of H2O	Temp	°F	Pres	psi(g)	in	in	Rate	MMCF/D	Gas1 MMCF
1	2005/09/16	11:15:00	Shut in														
2		11:15:00		550.00		550.00	0.00	0.00		0.00	0.00	0.000	0.000	0.000			0.000
3		11:30:00		536.00		532.00	2.00	78.00		72.50	1.500	0.178	0.002				0.002
4		11:45:00		520.00		533.00	4.00	78.00		72.00		0.250	0.004				0.004
5		12:00:00		515.00		530.00	4.00	78.00		72.50		0.251	0.007				0.007
6		12:15:00	1st point														
7		12:15:00		489.00		522.00	4.00	77.00		74.00		0.254	0.009				0.009
8		12:30:00		457.00		508.00	6.00	75.00		75.00		0.313	0.012				0.012
9		12:45:00		436.00		504.00	6.00	75.00		75.00		0.313	0.016				0.016
10		13:00:00		419.00		498.00	6.00	76.00		75.00		0.313	0.019				0.019
11		13:15:00	2nd point														
12		13:15:00		410.00		496.00	5.00	77.00		75.00		0.285	0.022				0.022
13		13:30:00		380.00		490.00	7.00	78.00		75.00		0.337	0.025				0.025
14		13:45:00		350.00		481.00	7.00	78.00		75.00		0.337	0.029				0.029
15		14:00:00		343.00		478.00	7.50	78.00		75.00		0.349	0.032				0.032
16		14:15:00	3rd point														
17		14:15:00		315.00		472.00	8.00	77.00		76.00		0.363	0.036				0.036
18		14:30:00		288.00		464.00	11.00	76.00		76.00		0.426	0.040				0.040
19		14:45:00		268.00		453.00	12.00	76.00		77.00		0.447	0.045				0.045
20		15:00:00		256.00		444.00	13.00	75.00		77.50		0.467	0.049				0.049
21		15:15:00	4th point														
22		15:15:00		252.00		439.00	12.00	76.00		77.50		0.448	0.054				0.054
23	2005/09/17	14:55:00	1 point														
24		14:55:00		245.00		427.00	5.00	93.00		70.00		0.273	0.410				0.410

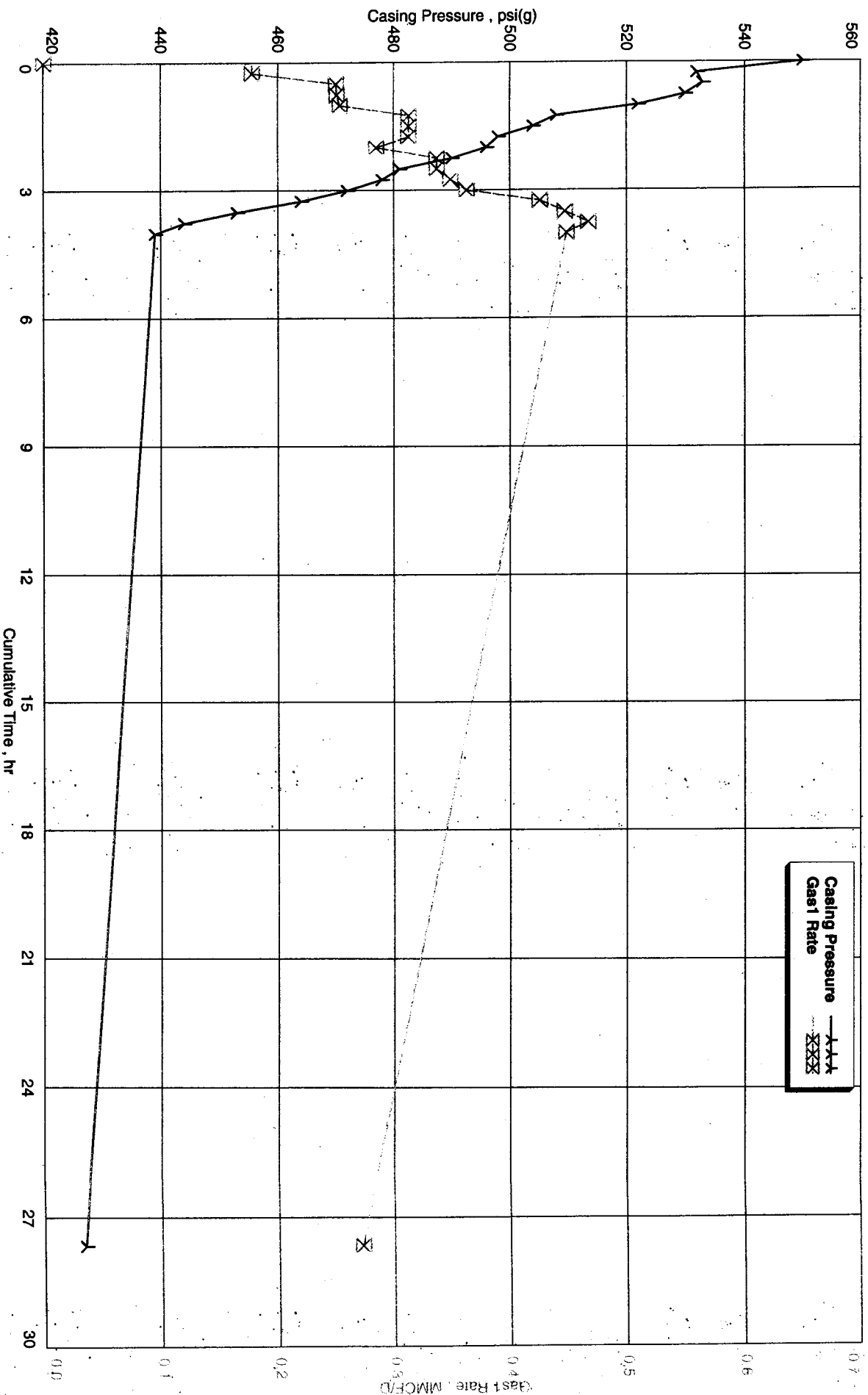
2005/09/16 11:15:00 To 2005/09/17 14:55:00

Gas	0.054	Cum.	0.054	MMCF
Oil	0.000	Cum.	0.000	bbl
Water	0.000	Cum.	0.000	bbl
Condensate	0.000	Cum.	0.000	bbl

McCoy Petroleum Corp
 29 30s 31w Haskell co KS
 Start Test Date: 2005/09/16
 Final Test Date: 2005/09/17

Schmidt D 1-29

Plot



[illegible]

Form G-2
(Rev. 7/03)

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

- ☐ Open Flow
- ☐ Deliverability

Test Date:

API No. 15

Company McCoy Petroleum Corporation		Lease Schmidt "D"		Well Number #1-29	
County Haskell	Location W/2 SW SE	Section 29	TWP 30S	RNG (E/W) 31W	Acres Attributed
Field Lette South		Reservoir Atoka & Cherokee		Gas Gathering Connection Regency	
Completion Date 03/14/05		Plug Back Total Depth 5295'		Packer Set at	
Casing Size 4.500	Weight 10.5000	Internal Diameter 4.052	Set at 5735	Perforations 5263-67,5207,	To 5188,5186
Tubing Size 2.375	Weight 4.7000	Internal Diameter 1.995	Set at 5261	Perforations	To
Type Completion (Describe) Perforations		Type Fluid Production Gas		Pump Unit or Traveling Plunger? Yes / No Flowing	
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide		% Nitrogen	Gas Gravity - G_g
Vertical Depth(ft)		Pressure Taps		(Meter Run) (Prover) Size	

Pressure Buildup: Shut in _____ 20 _____ at _____ (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM)

Well on Line: Started _____ 20 _____ at _____ (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in _____ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _t) or (P _s)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _s)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In											
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _{pl}) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _{sc}

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_s)² = 0.207

(P _c) ² = _____	(P _w) ² = _____	P _o = _____ %	(P _c - 14.4) + 14.4 = _____	(P _c) ² = _____	(P _w) ² = _____
(P _c) ² - (P _w) ² or (P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _w ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	LOG of formula 1 or 2, and divide by: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG []	Antilog

Open Flow

Mcfd @ 14.65 psia

Deliverability

Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the _____ day of _____, 20 _____.

Witness (if any)

For Company

For Commission

Checked by