

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
(Rev. 8/98)

TYPE TEST:

- ☒ Open Flow
☒ Deliverability

TEST DATE: 10-27-1999 **API No.** 15-129-21591

Company Pioneer Oil Company		Lease Ruby Kinsler		Well Number 1-41	
County Morton	Location Ne Ne	Section 4	TWP 32s 40w	RNG (E/W)	Acres Attributed 320
Field Kinsler		Reservoir Wab/Topeka		Gas Gathering Connection Amoco/Williams	
Completion Date 9/7/1999		Plug Back Total Depth 3207		Packer Set at	
Casing Size 5.500	Weight 14.000	Internal Diameter 5.012	Set at 3256	Perforations 3054	To 3060
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 3190	Perforations	To
Type Completion (Describe) commingled		Type Fluid Production gas		Pump Unit or Traveling Plunger? none	
Producing Thru (Annulus/Tubing) tubing		% Carbon Dioxide .079		% Nitrogen 23.950	Gas Gravity- Gg .780
Vertical Depth (ft) 3100		Pressure Taps flange		Meter Run Size 3.068	
Pressure Buildup: Shut in		10/23/1999@ 10:30a		TAKEN	10/26/1999@ 9:00a
Well on Line: Started		10/26/1999@ 9:00a		TAKEN	10/27/1999@ 6:15p

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						260	274	259	273	70.5	
Flow	1.500	29.8	23.40	64		207	221	180	194	33.3	

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	44.2	32.16	1.1323	.9962	1.0038	415		.780

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 75.3$
 $(P_w)^2 = 49.0$
 10.9
 $\%$
 $(P_c - 14.4) + 14.4 =$
 $(P_a)^2 = 0.207$
 $(P_d)^2 = .89$

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	LOG	Backpressure Curve Slope "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcfd
75.09	26.28	2.858	.4560	.874	.3985	2.503	1040
74.41	26.28	2.832	.4520	.874	.3951	2.484	1031

OPEN FLOW 1040 **Mcfd @ 14.65 psia**
DELIVERABILITY 1031 **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 11 day of Nov, 19 99

Witness (if any)

For Commission

Original: Wichita
Copy: Dodge City
Copy: Pioneer

For Company

Checked by

**KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST**

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 10-26-1999	
COMPANY Pioneer Oil Company		LEASE Ruby Kinsler	
WELL NO. 1-41			
COUNTY Morton	LOCATION Ne Ne	SECTION 4	TWP 32s 40w
		RNG	ACRES 320
FIELD Kinsler		PIPELINE CONNECTION Amoco/Williams	
RESERVOIR Wab/Topeka			
COMPLETION DATE 9/7/1999		PLUG BACK DEPTH 3207	
		PACKER SET AT	
CASING SIZE 5.500	WT. 14.000	ID 5.012	SET AT 3256
		PERF. 3054	TO 3060
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 3190
		PERF.	TO
TYPE COMPLETION (Describe) commingled		TYPE FLUID PRODUCTION gas	
PRODUCING THRU (Annulus/Tubing) tubing		RESERVOIR TEMPERATURE F 100	
		BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg .780	% CARBON DIOXIDE .079	% NITROGEN 23.950	API GRAVITY OF LIQUID
VERTICAL DEPTH (ft) 3100		TYPE METER CONN. flange	
		METER RUN SIZE 3.068	
REMARKS Wabaunsee perms 3054-3060 Topeka perms 3136-3146			

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						260	274	259	273		
1.	1.500	26.90	1.30	59		255	269	238	252	1.00	
2.	1.500	28.04	6.05	65		250	264	227	242	1.00	
3.	1.500	29.00	18.50	67		235	249	215	229	1.00	
4.	1.500	30.60	45.20	67		218	232	193	208	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	41.3	7.33	1.1323	1.0010	1.0037	95		.780
2.	11.410	42.4	16.02	1.1323	.9952	1.0037	206		.780
3.	11.410	43.4	28.34	1.1323	.9933	1.0035	364		.780
4.	11.410	45.0	45.10	1.1323	.9933	1.0038	580		.780

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.	252.4	274.4	269.4	75.3	72.6	2.7	95.1	98.1
2.	242.0	274.4	264.4	75.3	69.9	5.4	206.8	96.2
3.	229.4	274.4	249.4	75.3	62.2	13.1	364.9	90.4
4.	208.2	274.4	232.4	75.3	54.0	21.3	581.0	83.8

INDICATED WELLHEAD OPEN FLOW

1718

Mcfd @ 14.65 psia

"n" =

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 4 day of Nov, 19 99

Witness (if any)

For Commission

Original: Wichita
Copy : Dodge City
Copy: Pioneer

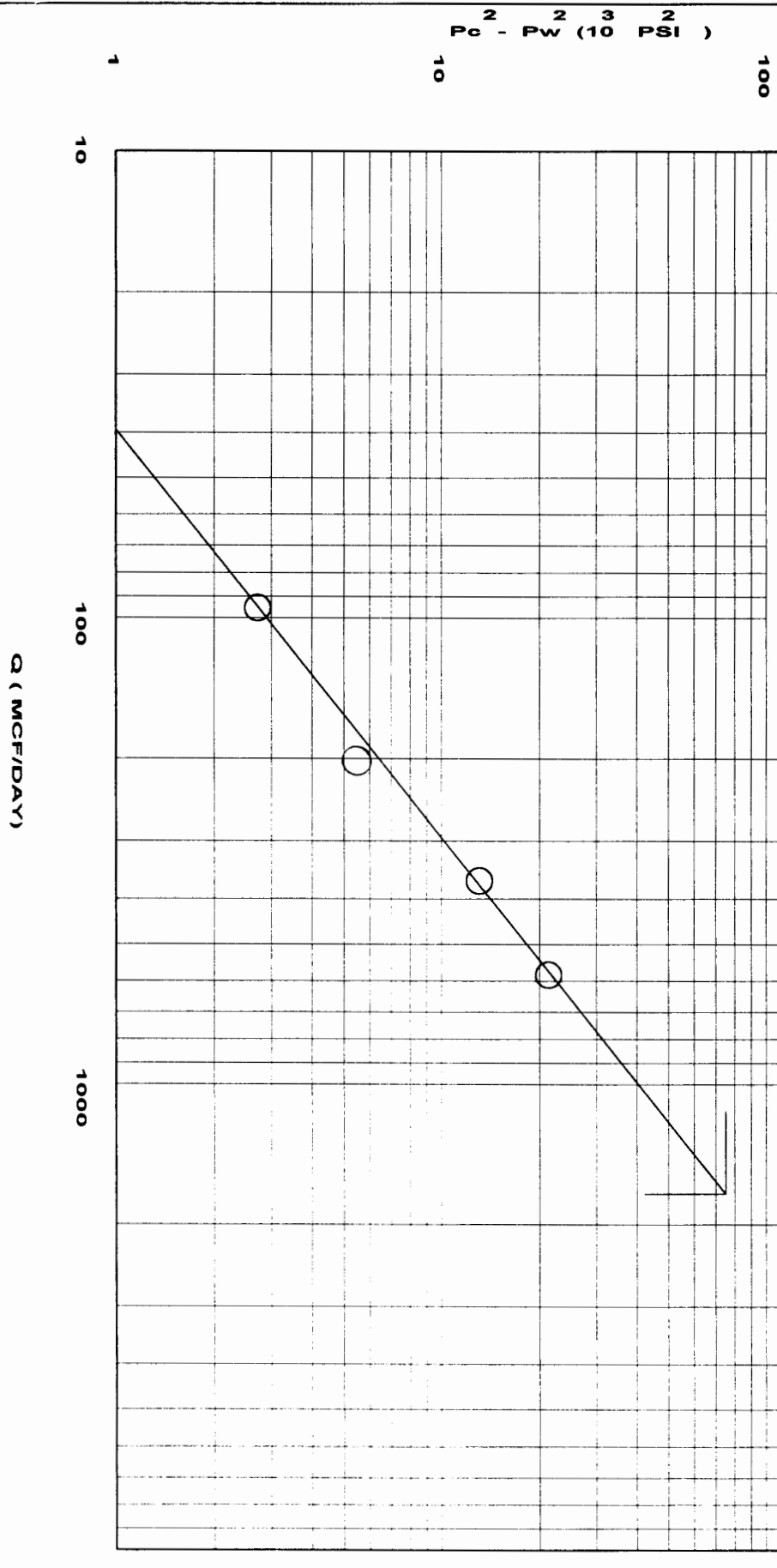
For Company

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER:
TEST DATE: 10-26-1999

Pioneer Oil Company
Ruby Kinsler 1-41
4 32s 40w
Morton
Exponent n: 0.8739
AOFF: 1718.



NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L. L. C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, Inc
 P. O. Box 2137
 Liberal, Kansas 67905
 Phone: 316-624-5389
 Fax: 316-626-7108

Lab Number: 995704
 Sample From: Ruby Kinsler 1-41 4pt
 Producer: Pioneer Oil
 Date:
 Time:
 Sampler:
 Source:

Analyzed: 10/26/99
 Pressure:
 Temperature:
 Location: 4-32-40
 County: Morton
 State: Kansas
 Formation: Top/Wab

	Mole %	GPM
Helium	He: 0.623	0.000
Hydrogen	H2: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 23.954	0.000
Carbon Dioxide	CO2: 0.079	0.000
Methane	C1: 62.186	0.000
Ethane	C2: 5.671	1.517
Propane	C3: 4.066	1.120
Iso Butane	iC4: 0.594	0.194
Normal Butane	nC4: 1.544	0.487
Iso Pentane	iC5: 0.348	0.127
Normal Pentane	nC5: 0.431	0.156
Hexanes Plus	C6+: 0.504	0.220

TOTAL: 100.000 3.822
 Z Fact: 0.9976
 SP.GR.: 0.7797
 BTU (SAT): 945.2 @ 14.73 psia
 BTU (DRY): 962.0 @ 14.73 psia
 OCTANE RATING: 93.2

COMMENTS:

0.000

10:30 - 231d

FieldNotes

187 1160

Company: Pioneer Oil Company		Address:		95% 247					
Wellname: Ruby K-200 1-41				90% 234					
Location: NENEVE 4-32-41		County: Martin	St: Ky	85% 221					
Formation: Web 108		Field/Pool:		80% 208					
TD:	Casing size:	Tubing size:	Plug back depth: 3207						
	Feet of:	Feet of:	Packer depth:						
Meter run size: 3.068	Orif (in) 1.5	Type meter connection: 8/16							
Gravity of Liquid:	Orif (in)	Producing through: Ruby							
Type of completion:		Mileage: 27 Navigator tower 4							
Date	Clk Tim	Tbg Pres	Csg Pres	Diff	Temp	Static/Prover	Wat Vol	Oil Vol	Comment
yy/mm/dd	clock	psi	psi	in of H2O	F	PSI	bbl	bbl	
9/10/65	0900	259.4	260						
	0915	236.6	258.8	.68	46	27.6			
	0930	237	257.2	1.09	52	26			
	0945	237.6	256.6	1.25	56	26.96			
	1000	238.2	255.4	1.26	58.5	26.87			1st pt
	1015	238.6	254.6	3.46	60	27.1			
	1030	230	252.2	4.87	62	27.4			
	1045	233.2	251.8	4.82	64	27.7			
	1100	227.6	250.2	6.05	65	28.01			2nd pt
	1115	216	242	18.41	67	29.35			
	1130	218	241	18.5	67	29.39			
	1145	214.4	239.6	18.34	68	29.45	12"		
	1200	214.6	237.2	17.12	68	29.3			3rd
	1215	197.6	229.6	38.9	68	30.5			
	1230	200.4	229.6	45.9	67	30.6			
	1245	196.2	221.6	46.6	67.5	30.8			
	1300	193.8	218	45.2	67.3	30.6			4th
10/27	1815	180	207	23.4	64.2	29.8			410

12 - OXY

Surface Sum rate

1837

30

16

STATE OF KANSAS - CORPORATION COMMISSION
GAS TEST STANDARDS AND SPECIFICATIONS FOR WELL SURVEILLANCE TEST

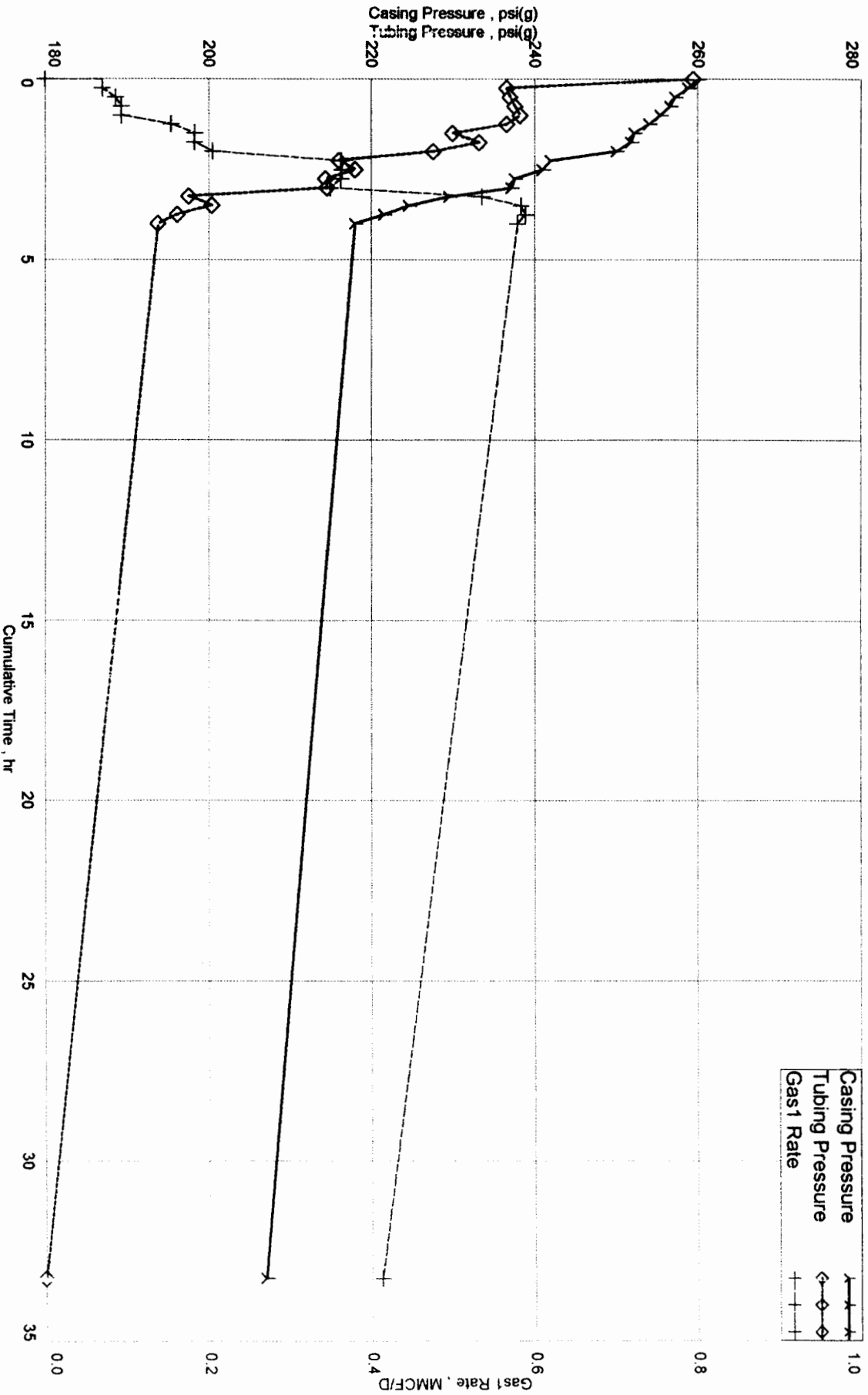
FORM 8-4 Rev

Company	Tester	TEST DATE	WELL NO.
Pioneer Oil Co.	Ruby Kinsler	12-21-98	1-46
Location	Section	Twp	Range
NE NE NE	4	32 S	40 N
County	Well Name	Well No.	Well No.
Wabunsee & Topeka	32071	32071	32071
Well No.	Well No.	Well No.	Well No.
3136	3136	3136	3136
3141	3141	3141	3141
3146	3146	3146	3146
3151	3151	3151	3151
3156	3156	3156	3156
3161	3161	3161	3161
3166	3166	3166	3166
3171	3171	3171	3171
3176	3176	3176	3176
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3186	3186	3186	3186
3191	3191	3191	3191
3196	3196	3196	3196
3201	3201	3201	3201
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3231	3231	3231	3231
3236	3236	3236	3236
3241	3241	3241	3241
3246	3246	3246	3246
3251	3251	3251	3251
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3296	3296	3296	3296
3301	3301	3301	3301
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4376	4376	4376	4376
43			

Pioneer Oil Company
 NE NE sec 4 T32s R40w
 Start Test Date: 1999/10/26
 Final Test Date: 1999/10/27

Ruby Kinsler 1-41

Plot



Pioneer Oil Company
NE NE sec 4 T32s R40W
Start Test Date: 1999/10/26
Final Test Date: 1999/10/27

FieldNotes Field Measurements

Ruby Kinsler 1-41

	Date	Clock Time	Comment	Casing		Tubing		Static		Diff		Meter1 Temp	Orifice1 in	Gas1 Rate
				Pres	psi(g)	Pres	psi(g)	Pres	psi(g)	Pres	in of H2O			
yyyy/mm/d hh:mm:ss														
1	1999/10/26	08:00:00	shut in	260.00	260.00	269.40	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
2		09:15:00		258.80	258.80	236.60	27.60	0.68	46.00	1.500	0.070			0.070
3		09:30:00		257.20	257.20	237.00	26.00	1.09	52.00		0.086			0.086
4		09:45:00		256.60	256.60	237.60	26.96	1.25	56.00		0.093			0.093
5		10:00:00	1st pt	255.40	255.40	238.20	26.87	1.26	58.50		0.093			0.093
6		10:15:00		254.00	254.00	236.60	27.10	3.46	60.00		0.154			0.154
7		10:30:00		252.20	252.20	230.00	27.40	4.87	62.00		0.183			0.183
8		10:45:00		251.80	251.80	233.20	27.70	4.82	64.00		0.183			0.183
9		11:00:00	2nd pt	250.00	250.00	227.60	28.04	6.05	65.00		0.205			0.205
10		11:15:00		242.00	242.00	216.00	29.35	18.41	67.00		0.363			0.363
11		11:30:00		241.00	241.00	218.00	29.39	18.50	67.00		0.364			0.364
12		11:45:00		237.60	237.60	214.40	29.45	18.34	68.00		0.363			0.363
13		12:00:00	3rd pt	237.20	237.20	214.60	29.30	17.12	68.00		0.350			0.350
14		12:15:00		229.60	229.60	197.60	30.50	38.90	68.00		0.536			0.536
15		12:30:00		224.60	224.60	200.40	30.60	45.90	67.00		0.584			0.584
16		12:45:00		221.60	221.60	196.20	30.80	46.60	67.50		0.589			0.589
17		13:00:00	4th pt	218.00	218.00	193.80	30.60	45.20	67.30		0.579			0.579
18	1999/10/27	18:15:00	1 pt	207.00	207.00	180.00	29.80	23.40	64.20		0.413			0.413

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number: 994788	Analyzed: 08/31/99
Sample From: Ruby Kinsler 1-41 DST 3	Pressure:
Producer: Pioneer Oil	Temperature:
Date:	Location: 4-32-40
Time:	County: Morton
Sampler: Mike Colontonio	State: Kansas
Source:	Formation: Topeka

	Mole %	GPM
Helium	He: 0.820	0.000
Hydrogen	H2: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 32.553	0.000
Carbon Dioxide	CO2: 0.050	0.000
Methane	C1: 51.295	0.000
Ethane	C2: 6.246	1.670
Propane	C3: 4.771	1.315
Iso Butane	iC4: 0.697	0.228
Normal Butane	nC4: 1.762	0.556
Iso Pentane	iC5: 0.448	0.164
Normal Pentane	nC5: 0.564	0.204
Hexanes Plus	C6+: 0.794	0.346

TOTAL: 100.000 4.483
Z Fact: 0.9976
SP.GR.: 0.8408
BTU (SAT): 898.4 @ 14.73 psia
BTU (DRY): 914.3 @ 14.73 psia
OCTANE RATING: 80.9

COMMENTS: 0.000

Flowing/Shutin bhp		
bhp /day / week		
4P ✓ G1	295	
1P ✓ G2	115	
Gas Analysis ✓	60	
Mileage RT ✓	270 .85 X 4	
Battery pk		515.90