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appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED Form C-122
Revised October, 1999

FEB 10 2005

ADH-ARTERIA

30-015-33496

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MURCHISON OIL & GAS				Lease or Unit Name PANDA BEAR ST. COM			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1/21/05	
Completion Date 1/4/05		Total Depth 10280		Plug Back TD 10240		Well No. 1	
Csg. Size 5 1/2		Wt. d 17 # 4.892		Perforations: From: 10000 To: 10028		Unit Ltr - Sec - TWP - Rge 2- 17- 28	
Tbg. Size 2 7/8		Wt. d 6.5 2.441		Perforations: From: To:		County EDDY	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 9902		Pool SE	
Producing Thru TBG				Reservoir Temp. °F 155.6 @ 9902		Mean Annual Temp. °F 60	
Baro. Press. -P _a 13.2				Connection SALES			
L 9900		H 9900		Gg 0.873		%CO ₂ 0.379	
%N ₂ 1.021		%H ₂ S X		Prover N/A		Meter Run 4.026	
Taps FLG							

Crow Flats Morrow

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp. °F	Press p.s.i.g.	Temp. °F	Press p.s.i.g.		Temp. °F
SI						2985		PKR		48 HRS
1	4	X 1.875	276	3.9	73	2977		"		1 HR
2	4	X 1.875	284	13.7	84	2961		"		1 HR
3	4	X 1.875	327	91.3	70	2883		"		1 HR
4	4	X 1.875	432	303.1	51	2559		"		1 HR
5										

RATE OF FLOW CALCULATIONS

No.	COEFFICIENT (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd
1							757
2							1,416
3			TOTAL		FLOW	METER	3,916
4							8,416
5							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	54.943	Mcf bbl
1					A.P. I. Gravity of Liquid Hydrocarbons	57.1	Deg
2					Specific Gravity Separator Gas	0.873	XXXXXXXX
3		N/A			Specific Gravity Flowing Fluid	XXXXXX	GMIX= .923
4					Critical Pressure	662	P.S.I.A. * 661 P.S.I.A.
5					Critical Temperature	445	R. * 461 R

P _c	2998.2	P ₂	8989.2	
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		2991.4	8948.2	41
2		2978.3	8870	119.2
3		2927.4	8569.7	419.5
4		2720.1	7399.2	1590
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{5.654}{\quad} \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3.195}{\quad}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{26.889}{\quad}$$

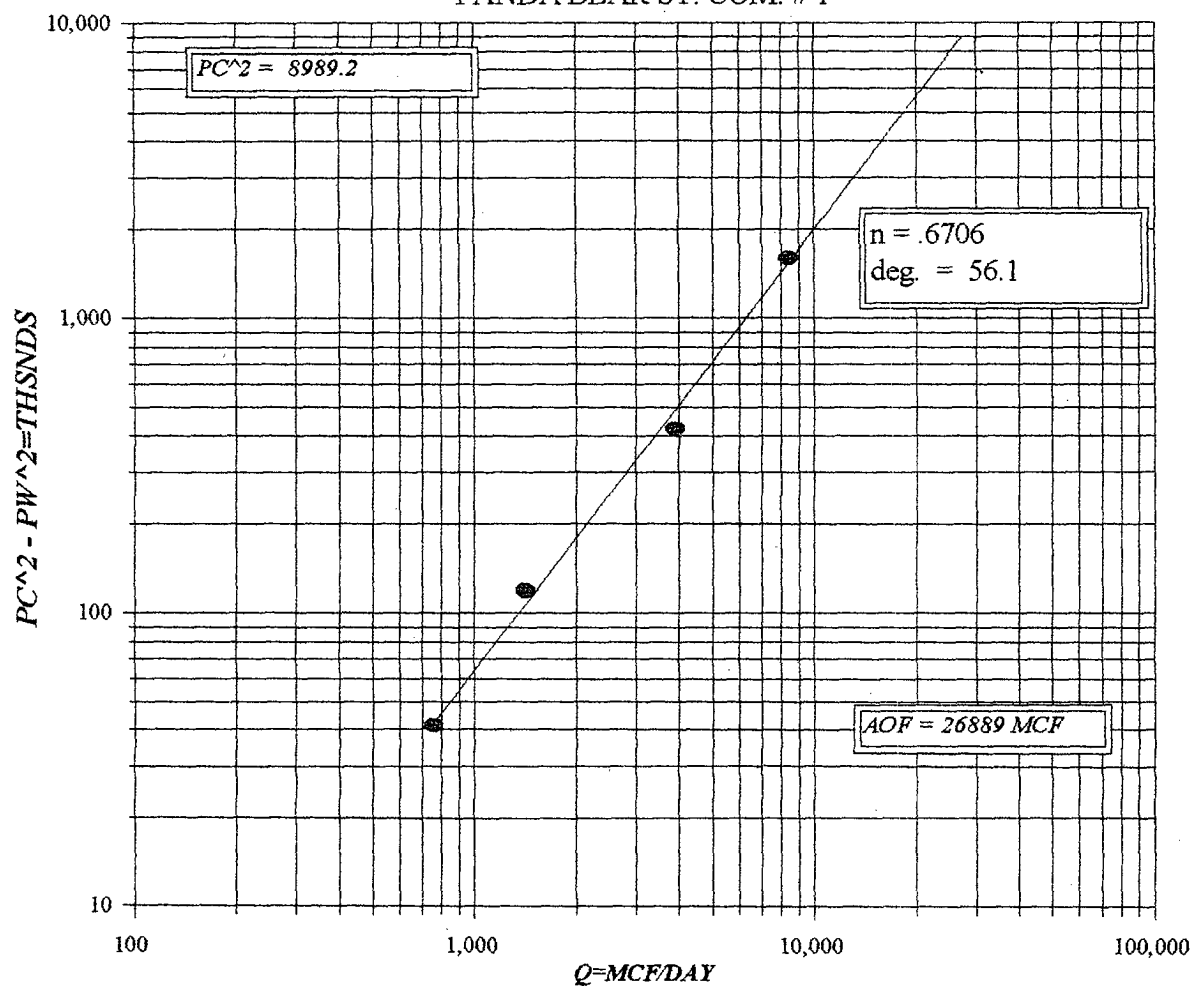
$$79825$$

Absolute Open Flow	26.889	Mcf @ 15.025	Angle of Slope (°)	56.1	Slope n:	0.6706
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Remarks: WELL PRODUCED 11.0 BBLs OF 57.1 API GR. CONDENSATE--CORR. TO 1.021 % N2			
Approved By Division:	Conducted By: Pro Well Testing & Wire Line	Calculated By: BM	Checked By: BM

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OBB-ARTS-910

MURCHISON OIL & GAS
PANDA BEAR ST. COM. # 1



NEW MEXICO G.O.R./G. MIX

NO. OF BBLS PRODUCED = 11.0
API GRAVITY @ 60 DEG. = 57.1

.....
SPECIFIC GRAVITY OF GAS = 0.8730

XX

TOTAL GAS PRODUCED = 604

G.O.R. = 54.943

G.MIX = 0.923



Laboratory Services, Inc.

2609 West Marland
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

RECEIVED
FEB 10 2005
OCCUPATIONAL

FOR: Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE:
IDENTIFICATION Panda Bear #1
COMPANY: Murchison
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED 1/21/05
ANALYSIS DATE: 1/24/05
PRESSURE - PSIG 429
SAMPLE TEMP. °F 53
ATMOS. TEMP. °F
REMARKS: Morrow Formation

GAS (XX) LIQUID ()
SAMPLED BY: B. Pena
ANALYSIS BY: Vickie Biggs

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	1.021	
Carbon Dioxide (CO2)	0.379	
Methane (C1)	84.257	
Ethane (C2)	8.737	2.331
Propane (C3)	3.722	1.023
I-Butane (IC4)	0.360	0.118
N-Butane (NC4)	0.825	0.260
I-Pentane (IC5)	0.157	0.057
N-Pentane (NC5)	0.124	0.045
Hexane Plus (C6+)	0.418	0.181
	100.000	4.015
BTU/CU.FT. - DRY	1169	MOLECULAR WT. 19.5143
AT 14.650 DRY	1165	
AT 14.650 WET	1145	
AT 14.73 DRY	1172	
AT 14.73 WET	1152	
SPECIFIC GRAVITY -		
CALCULATED	0.673	
MEASURED		

**Laboratory Services, Inc.**

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Hobbs, New Mexico 88240
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ASTM DISTILLATION

Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

Sample Date: 1/21/05
Sampled By: Ben Pena

Murchison
Panda Bear #1

Percent DistilledTemperature

IBP	90
5	118
10	142
20	180
30	206
40	228
50	250
60	300
70	380
80	526
EP	620

% Recovered =	87.0
% Residue =	2.0
% Loss =	11.0

API Gravity @ 60° F = 57.1

Rolland Perry