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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

Form C-122
Revised October, 1999



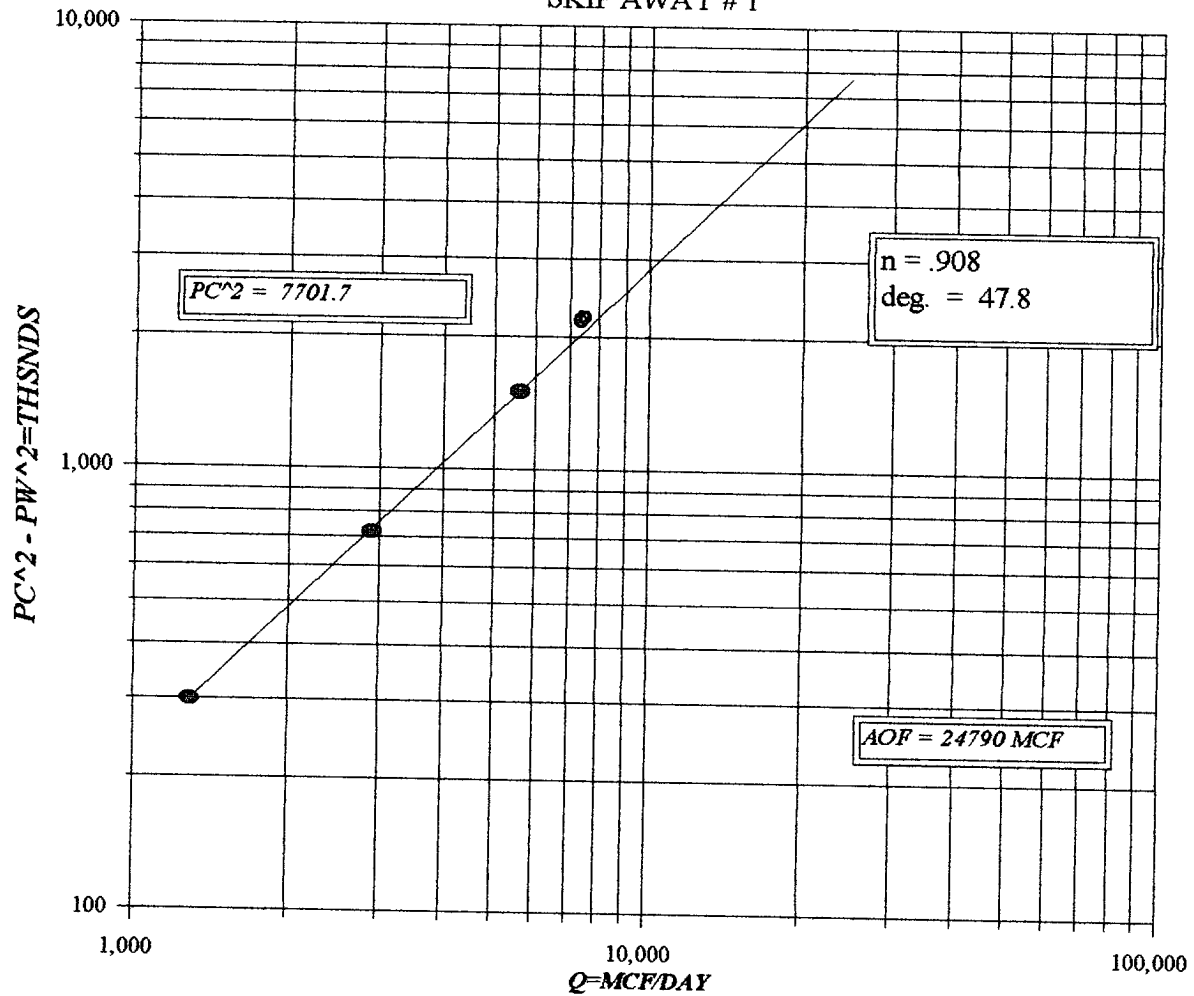
30-015-32445

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MURCHISON OIL & GAS, INC.					Lease or Unit Name SKIP AWAY					
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1/31/03		Well No. 1			
Completion Date 1/13/03		Total Depth 8750		Plug Back TD 8669		Elevation 3379 GL		Unit Ltr - Sec - TWP - Rge L 28 17 2826		
Csg. Size 5 1/2	Wt. 17 #	d 4.892	Set At 8750	Perforations: From: 8462 To: 8558			County EDDY			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 8367	Perforations: From: OPEN To: ENDED			Pool Kennedy Farms Morroval			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 8367			Formation MORROW			
Producing Thru Tbg. Size		Reservoir Temp. °F 157.7 @ 8367		Mean Annual Temp. °F 60		Baro. Press. -P _a 13.2		Connection AGAVE ENERGY		
L 8367	H 8367	Gg 0.622	%CO ₂ 0.665	%N ₂ 0.358	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG		
FLOW DATA				TUBING DATA			CASING DATA			
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						2762		PKR		
1	4 X	2.000	223	10.4	91	2700		"		
2	4 X	2.000	241	45.4	56	2590		"		
3	4 X	2.000	289	143.8	61	2318		"		
4	4 X	2.000	330	217.5	62	2030		"		
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								1,294		
2								2,907		
3	MEASURED			BY	TOTAL	FLOW	METER	5,618		
4								7,422		
5										
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf bbl.					
1					A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.					
2					Specific Gravity Separator Gas 0.622 XXXXXXXX					
3			N/A		Specific Gravity Flowing Fluid XXXXX					
4					Critical Pressure 671 P.S.I.A. P.S.I.A.					
5					Critical Temperature 365 R. R					
P _c 2775.2 P _{c2} 7701.7										
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) P _c ² = 5.128 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.413$					
1		2720.8	7402.7	299	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 24.790$					
2		2642.7	6983.6	718.1						
3		2489.9	6199.8	1502						
4		2345.8	5502.9	2198.8						
5										
Absolute Open Flow 24,790					Mcf/d @ 15.025		Angle of Slope (°): 47.8		Slope n: 0.908	
Remarks: FLUID PRODUCED TO SMALL TO MEASURE										
Approved By Division:			Conducted By: JARREL SER. INC.		Calculated By: BM			Checked By: BM		

MURCHISON OIL & GAS INC..

SKIP AWAY # 1



O COMPANY : MURCHISON OIL & GAS LEASE : SKIP AWAY WELL NO. : 1
 UNIT : L SECTION : 28 TOWNSHIP : 17
 L : 8367 H : 8367 L/H : 1 G/GMIX : 0.622
 %CO2 : 0.655 %N2 : 0.358 H2S : DATE : 1-31-03
 d : 1.995 Fr : 0.018231 GH : 5204.3 RANGE : 28

VOL 1 : 1294 PSIA 1 : 2713.2
 VOL 2 : 2907 PSIA 2 : 2603.2
 VOL 3 : 5618 PSIA 3 : 2331.2
 VOL 4 : 7422 PSIA 4 : 2043.2

RESV.TEMP 157.7

SHUT-IN PR= 2775.2

PCR : 671

TCR : 365

Pc = 2775.2 Pc2 = 7701.7 *

Pt2 = 7361.5 Pw = 2720.8 *
 6776.7 2642.7 *
 5434.5 2489.9 *
 4174.7 2345.8 *

Pc2-Pw2= 299.0 Pw2 = 7402.7 *
 718.1 6983.6 *
 1502.0 6199.8 *
 2198.8 5502.9 *

n = 0.908 ✓

Pc2/(Pc2-Pw2) = 25.756
 10.725
 5.128 ✓
 3.503

[Pc2/Pc2-Pw2]n = 19.108
 8.624
 4.413 ✓
 3.122

AOF= Q 24.726
 25.070
 24.790 ✓
 23.168

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 QM	1.294	1.294	2.907	2.907	5.618	5.618	7.422	7.422
2 TW	534	534	534	534	534	534	534	534
3 Ts	617.7	617.7	617.7	617.7	617.7	617.7	617.7	617.7
4 T	575.8	575.8	575.8	575.8	575.8	575.8	575.8	575.8
PR (est)	4.04		3.88		3.47		3.05	
5 Z(est)	0.797	0.808	0.795	0.804	0.793	0.797	0.796	0.793
6 TZ	459.0	465.0	457.7	462.8	456.5	458.9	458.5	456.8
7 GH/TZ	11.339	11.192	11.370	11.246	11.400	11.341	11.350	11.393
8 eS	1.530	1.521	1.532	1.525	1.533	1.530	1.531	1.533
9 l-e-S	0.346	0.343	0.347	0.344	0.348	0.346	0.347	0.348
10 Pt	2713.2	2713.2	2603.2	2603.2	2331.2	2331.2	2043.2	2043.2
11 Pt2 /1000	7361.5	7361.5	6776.7	6776.7	5434.5	5434.5	4174.7	4174.7
12 Fr	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231
13 Fc=FrTZ	8.368	8.478	8.345	8.437	8.322	8.366	8.360	8.328
14 FcQm	10.83	10.97	24.26	24.53	46.76	47.00	62.05	61.81
15 L/H(FcQm)	117.2	120.3	588.5	601.6	2186.1	2209.2	3849.7	3820.2
16 Fw	40.60975	41.24831	204.2719	206.9801	760.4805	765.2912	1334.416	1328.2801
17 Pw2	7402.1	7402.7	6980.9	6983.6	6195.0	6199.8	5509.1	5502.9
18 Ps2	11324.3	11263.1	10692.6	10647.0	9499.7	9485.7	8431.8	8436.2
19 Ps	3365.2	3356.1	3270.0	3263.0	3082.2	3079.9	2903.8	2904.5
20 P	3039.2	3034.6	2936.6	2933.1	2706.7	2705.5	2473.5	2473.9
21 Pr	4.53	4.52	4.38	4.37	4.03	4.03	3.69	3.69
22 Tr	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
23 Z	0.808	0.807	0.804	0.804	0.797	0.797	0.793	0.793

FORM C122-D





Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Jarrel Services Inc.
Attention: Mr. Donnie Dickerson
P. O. Box 1230
Hobbs, New Mexico 88240

SAMPLE:
IDENTIFICATION: Skip Away #1
COMPANY: Murchison Oil & Gas
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 1/31/03 2:15 pm
ANALYSIS DATE: 2/3/03
PRESSURE - PSIG 344
SAMPLE TEMP. °F 63
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: Donnie Dickerson
ANALYSIS BY: Vickie Biggs

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.358	
Carbon Dioxide (CO2)	0.665	
Methane (C1)	91.789	
Ethane (C2)	4.548	1.213
Propane (C3)	1.381	0.380
I-Butane (IC4)	0.194	0.063
N-Butane (NC4)	0.325	0.102
I-Pentane (IC5)	0.115	0.042
N-Pentane (NC5)	0.088	0.032
Hexane Plus (C6+)	0.537	0.233
	100.000	2.065

BTU/CU.FT. - DRY 1093
AT 14.650 DRY 1090
AT 14.650 WET 1070
AT 14.73 DRY 1095
AT 14.73 WET 1077

MOLECULAR WT. 18.0373

SPECIFIC GRAVITY -
CALCULATED 0.622
MEASURED

