

**1 - EL PASO (DOD) OIL
NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE-POINT BACK PRESSURE TEST FOR GAS WELL**

Form C-122
Revised 9-1-65

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 2-02-81	
Company Dugan Production		Connection New Well	
Pool Basin Dakota		Formation Dakota	
Completion Date 1-12-81	Total Depth 7025'	Plug Back TD 6875'	Elevation 6675' GL
Form or Lease Name A New Dawn		Well No. #2 DK	
Csg. Size 4 1/2"	Wt. 10.5#	Set At 6975' RKB	Perforations: From 6793 To 6839
Csg. Size 1 1/2"	Wt. 2.9#	Set At 6783'	Perforations: From To
Type Well - Single - Dradenned - G.G. or G.O. Multiple single - gas		Facker Set At	
Producing Thru tbq.		Reservoir Temp. °F a	Mean Annual Temp. °F
Baro. Press. - P _a		State New Mexico	
L	H	G _g .60	% CO ₂ % N ₂ % H ₂ S Prover 2"

FLOW DATA						TUSING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							1598		1512	
1.	2"	X	3/8"	445		61 ⁰	445		1182	
2.	2"	X	3/8"	315		63 ⁰	315		1008	
3.	2"	X	3/8"	189		63 ⁰	189		683	
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcf/d
1	2.378		457	.999	1.291	1.040	1458
2	2.378		327	.997	1.291	1.029	1030
3	2.378		201	.997	1.291	1.016	625
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	P.S.I.A.	Critical Temperature	R	P.S.I.
1.													
2.													
3.													
4.													
5.													

P _c 1624	P _w 2,637.376	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1765$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7919$
NO. 1	P _r 1194	P _w 1,425,636	P _w ² 1,211,740
2			
3			
4			
5			

Absolute Open Flow 2613		Mcf/d @ 15.025	Angle of Slope θ	Slope, n 75
Remarks:				
Approved By Commission:	Conducted By: F.S. Hamrick	Calculated By: F.S. Hamrick	Checked By:	

BJB/skw