

Formation Testing Service Report

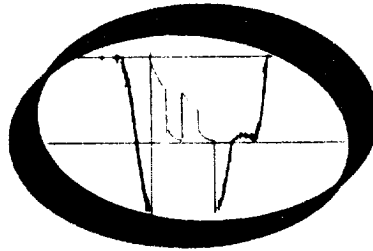
J. C. MAXWELL
1 Series Name

1
Well No.

2
Test No.

11,200-11,372'
Tested Interval

SUNMARK EXPLORATION COMPANY
1 Series Owner/Company Name



HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

FLUID SAMPLE DATA				Date 3-19-80		Ticket Number 618406	
Sampler Pressure _____ P.S.I.G. at Surface Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____ Gravity _____ ° API @ _____ ° F. Gas/Oil Ratio _____ cu. ft./bbl.				Kind of D.S.T. OPEN HOLE Halliburton Location HOBBS Tester D. WILLIAMS M. LAWRENCE Witness _____		Drilling Contractor RAIL DRILLING RIG # 2 DR	
				EQUIPMENT & HOLE DATA			
				Formation Tested Chester Elevation 3820' Ft. Net Productive Interval 171' Ft. All Depths Measured From Kelly Bushing Total Depth 11,372' Ft. Main Hole/Casing Size 8 3/4" Drill Collar Length 585' I.D. 2 1/2" Drill Pipe Length 10,564' I.D. 3.826" Packer Depth(s) 11,192-11,200' Ft. Depth Tester Valve 11,152' Ft.			
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Floor Choke	
						Bottom Choke .75"	
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks Misrun See production test data sheet							
TEMPERATURE		Gauge No. 1928		Gauge No. 1927		Gauge No.	
		Depth: 11176 Ft.		Depth: 11367 Ft.		Depth: _____ Ft.	
		24 Hour Clock		24 Hour Clock		Hour Clock	
Est. °F.		Blanked Off No		Blanked Off YES		Blanked Off	
Actual °F.		Pressures		Pressures		Pressures	
		Field	Office	Field	Office	Field	Office
Initial Hydrostatic		6213.9	6229.4	6372	6351.5		
First Period	Flow Initial						
	Flow Final						
	Closed In						
Second Period	Flow Initial						
	Flow Final						
	Closed In						
Third Period	Flow Initial						
	Flow Final						
	Closed In						
Final Hydrostatic			6229.4		6351.5		

FORMATION TEST DATA

Legal Location Sec. - Twp. - Rng. **S-27 T-14S-R-37E**
 Lease Name **J. C. MAXWELL**
 Well No. **1**
 Test No. **2**
 Tested Interval **11,200-11,372'**
 County **LEA**
 State **NEW MEXICO**
 Lease Owner/Company Name **SUNMARK EXPLORATION COMPANY**

Casing perfs _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 618406
Gas gravity _____ Oil gravity _____ GOR _____
Spec. gravity _____ Chlorides _____ ppm Res _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

KET NO.

618406

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	6"	3"	1'	
Water Cushion Valve				
Drill Pipe	4.50"	3.826"	10,564.50'	
Drill Collars	6.50"	2.50 "	585'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	11,152.50'
Multiple CIP Sampler	5"	.75"	4'	
Extension Joint (3 each)	5"	.87"	15'	
AP Running Case	5"	3.25"	5'	11,176.50'
Hydraulic Jar	5"	1.75'	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	7 3/4"	1.53"	6'	11,192.50'
Distributor	5"	1.68"	2'	
Packer Assembly	7 3/4"	1.53 "	6'	11,200.50'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50 "	4'	
	6"	2"	' Change over	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	6.50"	2.50 "	123.50'	
	6"	3"	1' X over	
Flush Joint Anchor	5 3/4"	2.8511	35'	
Blanked Off B.T. Running Case	5 3/4"	2.50"	6'	11,367'
Total Depth				11,372'

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	Feet
$D.R.$	= Damage Ratio	—
EI	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h_1	= Net Pay Thickness	Feet
K	= Permeability	md
K_1	= Permeability (From Net Pay Zone h_1)	md
m	= Slope Extrapolated Pressure Plot ($Psi^2/cycle$ Gas)	$psi/cycle$
OF_1	= Maximum Indicated Flow Rate	MCF/D
OF_2	= Minimum Indicated Flow Rate	MCF/D
OF_3	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF_4	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
$P_{w.}$	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q_1	= Theoretical Production w/Damage Removed	bbls/day
Q_m	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	$^{\circ}R$
Z	= Compressibility Factor	—
μ	= Viscosity Gas or Liquid	CP
$\log$	= Common Log	

* Potentiometric Surface Reference to Pottery Table When Elevation Not Given, Fresh Water Corrected to 100 $^{\circ}F$.