

FIELD: INDIAN BASIN  
SERVOIR: MORROW

# ILLEGIBLE

AT CORRELATIONS:  
 GAS PSEUDO-CRITICAL PROPERTIES: SUTTON  
 GAS COMPRESSIBILITY: DRANCHUK & ABOU-KASSEM  
 GAS VISCOSITY: LEE, GONZALEZ, & EAKIN  
 SOLUTION GWR: CULBERSON & MCKETTA  
 WATER FVF: DODSON & STANDING  
 WATER VISCOSITY: MATTHEWS & RUSSELL

INPUT DATA:  
 TEMPERATURE: 170.0 DEG F      STD PRESS: 14.700 PSIA      STD TEMP: 60.0 DEG F  
 SEP PRESS: 114.7 PSIA      SEP TEMP: 60.0 DEG F

GAS GRAVITY (AIR=1): .5810  
 IMPURITIES: CO2= .57%    N2= .42%    H2S=00.00%  
 PSEUDO-CRITICAL PRESSURE: 679.7 PSIA  
 PSEUDO-CRITICAL TEMPERATURE: 345.0 DEG R  
 WATER GRAVITY: 1.050

TOTAL DISSOLVED SOLIDS: 6.47 %

GAS PROPERTIES				WATER PROPERTIES			
PSIA	PSI**2/CP	Z FACTOR	COMPR 1/PSI	SOLN GWR	FVF	COMPR 1/PSI	VIS
50	1.96697E+05	.9969	2.008E-02	4	1.0263	3.207E-06	.4391
100	7.87797E+05	.9925	1.907E-02	4	1.0262	3.204E-06	.4391
150	1.77469E+06	.9888	6.741E-03	8	1.0261	3.209E-06	.4392
200	3.15809E+06	.9852	3.073E-03	1.1	1.0260	3.214E-06	.4393
250	4.93849E+06	.9816	4.073E-03	1.4	1.0260	3.218E-06	.4393
300	7.11608E+06	.9781	5.409E-03	1.7	1.0259	3.222E-06	.4394
350	9.69999E+06	.9746	7.026E-03	1.9	1.0259	3.226E-06	.4394
400	1.26622E+07	.9712	2.570E-03	2.2	1.0258	3.230E-06	.4395
450	1.60000E+07	.9678	3.241E-03	2.5	1.0257	3.234E-06	.4395
500	1.97000E+07	.9644	2.069E-03	2.8	1.0256	3.237E-06	.4396
550	2.37000E+07	.9610	1.035E-03	3.0	1.0255	3.240E-06	.4396

Pressure	GAS DENSITY	TEMP	WATER DENSITY	TEMP
2550				
2600				
2650				
2700				
2750				
2800				
2850				
2900				
2950				
3000				
3050				
3100				
3150				
3200				
3250				
3300				
3350				
3400				
3450				
3500				
3550				
3600				
3650				

ILLEGIBLE

FIELD: INDIAN BASIN  
SERVICED: MONTHLY

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PRESSURE: 3620 GAS DENSITY: 0.1858 TEMPERATURE: 10.8 WATER DENSITY: 0.9807  
PSIA: 3620 LC/CUFT: 3.2700 EPL/MCF: 4423  
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PSIA	PSEUDO PR	Z FACTOR	GAS PROPERTIES	COMPR	WTR VAPOR	VIS	SOLN GMR	FVF	COMPR	VIS
			1/PSI	BBL/MMCF	CP	SCF/STB	BBL/STB	1/PSI	CP	
1500	1.74718E+08	.9140	7.029E-04	.69	.0145	7.3	1.0241	3.280E-06	.4406	
1550	1.86187E+08	.9124	6.793E-04	.68	.0146	7.4	1.0241	3.280E-06	.4407	
1600	1.97977E+08	.9100	6.570E-04	.67	.0147	7.6	1.0240	3.280E-06	.4407	
1650	2.10084E+08	.9094	6.360E-04	.65	.0148	7.8	1.0239	3.281E-06	.4408	
1700	2.22502E+08	.9021	6.160E-04	.64	.0149	7.9	1.0238	3.281E-06	.4408	
1750	2.35235E+08	.9069	5.970E-04	.63	.0150	8.1	1.0238	3.282E-06	.4409	
1800	2.48248E+08	.9058	5.789E-04	.61	.0151	8.3	1.0237	3.282E-06	.4409	
1850	2.61565E+08	.9048	5.617E-04	.60	.0152	8.5	1.0236	3.282E-06	.4410	
1900	2.75166E+08	.9039	5.452E-04	.59	.0153	8.6	1.0236	3.283E-06	.4410	
1950	2.89055E+08	.9031	5.295E-04	.57	.0154	8.8	1.0235	3.283E-06	.4411	
2000	3.03213E+08	.9024	5.144E-04	.56	.0155	9.0	1.0234	3.283E-06	.4411	
2050	3.17650E+08	.9019	5.000E-04	.55	.0156	9.1	1.0233	3.283E-06	.4412	
2100	3.32347E+08	.9013	4.861E-04	.54	.0157	9.2	1.0233	3.283E-06	.4412	
2150	3.47301E+08	.9008	4.728E-04	.54	.0158	9.4	1.0232	3.282E-06	.4413	
2200	3.62507E+08	.9004	4.600E-04	.53	.0159	9.5	1.0231	3.282E-06	.4414	
2250	3.77967E+08	.9004	4.477E-04	.52	.0160	9.7	1.0230	3.280E-06	.4414	

ILLEGIBLE

\*\*\*\*\* WATER PROPERTIES \*\*\*\*\*

PSIA	PSEUDO PR	Z FACTOR	GAS PROPERTIES	COMPR	WTR VAPOR	VIS	SOLN GMR	FVF	COMPR	VIS
			1/PSI	BBL/MMCF	CP	SCF/STB	BBL/STB	1/PSI	CP	
1500	1.74718E+08	.9140	7.029E-04	.69	.0145	7.3	1.0241	3.280E-06	.4406	
1550	1.86187E+08	.9124	6.793E-04	.68	.0146	7.4	1.0241	3.280E-06	.4407	
1600	1.97977E+08	.9100	6.570E-04	.67	.0147	7.6	1.0240	3.280E-06	.4407	
1650	2.10084E+08	.9094	6.360E-04	.65	.0148	7.8	1.0239	3.281E-06	.4408	
1700	2.22502E+08	.9021	6.160E-04	.64	.0149	7.9	1.0238	3.281E-06	.4408	
1750	2.35235E+08	.9069	5.970E-04	.63	.0150	8.1	1.0238	3.282E-06	.4409	
1800	2.48248E+08	.9058	5.789E-04	.61	.0151	8.3	1.0237	3.282E-06	.4409	
1850	2.61565E+08	.9048	5.617E-04	.60	.0152	8.5	1.0236	3.282E-06	.4410	
1900	2.75166E+08	.9039	5.452E-04	.59	.0153	8.6	1.0236	3.283E-06	.4410	
1950	2.89055E+08	.9031	5.295E-04	.57	.0154	8.8	1.0235	3.283E-06	.4411	
2000	3.03213E+08	.9024	5.144E-04	.56	.0155	9.0	1.0234	3.283E-06	.4411	
2050	3.17650E+08	.9019	5.000E-04	.55	.0156	9.1	1.0233	3.283E-06	.4412	
2100	3.32347E+08	.9013	4.861E-04	.54	.0157	9.2	1.0233	3.283E-06	.4412	
2150	3.47301E+08	.9008	4.728E-04	.54	.0158	9.4	1.0232	3.282E-06	.4413	
2200	3.62507E+08	.9004	4.600E-04	.53	.0159	9.5	1.0231	3.282E-06	.4414	
2250	3.77967E+08	.9004	4.477E-04	.52	.0160	9.7	1.0230	3.280E-06	.4414	

# ILLEGIBLE

Line	Account	Amount	Description	Amount
1000	1000	1000	1000	1000
1050	1050	1050	1050	1050
1100	1100	1100	1100	1100
1150	1150	1150	1150	1150
1200	1200	1200	1200	1200
1250	1250	1250	1250	1250
1300	1300	1300	1300	1300
1350	1350	1350	1350	1350
1400	1400	1400	1400	1400
1450	1450	1450	1450	1450
1500	1500	1500	1500	1500
1550	1550	1550	1550	1550
1600	1600	1600	1600	1600
1650	1650	1650	1650	1650
1700	1700	1700	1700	1700
1750	1750	1750	1750	1750
1800	1800	1800	1800	1800
1850	1850	1850	1850	1850
1900	1900	1900	1900	1900
1950	1950	1950	1950	1950
2000	2000	2000	2000	2000
2050	2050	2050	2050	2050
2100	2100	2100	2100	2100
2150	2150	2150	2150	2150
2200	2200	2200	2200	2200
2250	2250	2250	2250	2250
2300	2300	2300	2300	2300
2350	2350	2350	2350	2350
2400	2400	2400	2400	2400
2450	2450	2450	2450	2450
2500	2500	2500	2500	2500
2550	2550	2550	2550	2550
2600	2600	2600	2600	2600
2650	2650	2650	2650	2650
2700	2700	2700	2700	2700
2750	2750	2750	2750	2750
2800	2800	2800	2800	2800
2850	2850	2850	2850	2850
2900	2900	2900	2900	2900
2950	2950	2950	2950	2950
3000	3000	3000	3000	3000

ISSURE	P/Z	GAS DENSITY	FVF	FVF	WATER DENSITY
PSIA	LB/CUFT	CUFT/SCF	SCF/MSCF	LB/CUFT	
2700.	2990.0	7.45	5.957E-03	1.061E+00	64.20
2750.	3042.3	7.66	5.854E-03	1.043E+00	64.20
2800.	3095.2	7.71	5.754E-03	1.025E+00	64.21
2850.	3147.3	7.84	5.659E-03	1.008E+00	64.22
2900.	3198.9	7.97	5.568E-03	9.917E-01	64.22
2950.	3250.2	8.09	5.480E-03	9.761E-01	64.23
3000.	3301.0	8.22	5.396E-03	9.610E-01	64.23
3050.	3351.4	8.35	5.316E-03	9.466E-01	64.24
3100.	3401.3	8.47	5.237E-03	9.327E-01	64.24
3150.	3450.9	8.59	5.161E-03	9.193E-01	64.25
3200.	3500.0	8.72	5.089E-03	9.064E-01	64.26
3250.	3548.6	8.84	5.019E-03	8.940E-01	64.26
3300.	3596.8	8.96	4.952E-03	8.820E-01	64.27
3350.	3644.9	9.08	4.887E-03	8.704E-01	64.27
3400.	3691.9	9.19	4.825E-03	8.593E-01	64.28
3450.	3738.7	9.31	4.764E-03	8.485E-01	64.28
3500.	3785.1	9.43	4.706E-03	8.381E-01	64.29
3550.	3831.0	9.54	4.649E-03	8.281E-01	64.29
3600.	3876.5	9.65	4.595E-03	8.184E-01	64.30
3650.	3921.6	9.77	4.542E-03	8.090E-01	64.31

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