

NMOCD Case Nos. 11897 & 11899

January 8, 1998

Dugan Production Corp.

Exhibit No. 14

Calculate BHP and Z-factor from surface shut-in pressure

11/07/97

WELL NAME : Mona Lisa No.2-MV (proposed) @ mid perf = 4670' (est.)
 GAS GRAVITY: 0.73 % N2 0.41
 CONDENSATE (YES=1): 1 % CO2 0.33 %
 RESERVOIR TEMP: 120 'F % H2S 0.00 %
 SURFACE TEMP: 60 'F Pc = 662.97 %
 DEPTH OF ZONE: 4,670 feet Tc = 389.75

SURFACE PRES	BHP	Z	BHP/Z
psia	psia		psia
942	1,087	0.8480	1,281

Average SIWHP of 7 offset wells - Breech B 220M, Breech 224A, 307, B54, NCPA #1E, Candado #1 + 1E.

Calculate BHP and Z-factor from surface shut-in pressure

11/07/97

WELL NAME : Mona Lisa No.2-DK (proposed) @ mid perf = 6690' (est.)
 GAS GRAVITY: 0.73 % N2 0.42
 CONDENSATE (YES=1): 1 % CO2 1.18 %
 RESERVOIR TEMP: 150 'F % H2S 0.00 %
 SURFACE TEMP: 60 'F Pc = 667.22 %
 DEPTH OF ZONE: 6,690 feet Tc = 388.42

SURFACE PRES	BHP	Z	BHP/Z
psia	psia		psia
2,154	2,680	0.8171	3,280

Average SIWHP of 7 offset wells - Breech B 220M, Breech 224A, 307, B54, NCPA #1E, Candado #1 + 1E.

Calculate BHP and Z-factor from surface shut-in pressure

11/07/97

WELL NAME : Mona Lisa No.2-DK (proposed) - Dakota BHP @ MV datum
 GAS GRAVITY: 0.73 % N2 0.42
 CONDENSATE (YES=1): 1 % CO2 1.18 %
 RESERVOIR TEMP: 120 'F % H2S 0.00 %
 SURFACE TEMP: 60 'F Pc = 667.22 %
 DEPTH OF ZONE: 4,670 feet Tc = 388.42

SURFACE PRES	BHP	Z	BHP/Z
psia	psia		psia
2,154	2,531	0.7756	3,263

CO.CD 23 EL PASO NATURAL GAS
CUSTOMER ACCOUNTING SERVICES DEPARTMENT
VOLUME CALCULATION DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79978

CONTACTS:
EL PASO FIELD SERVICES
(713) 510-2931
EL PASO MAINLINE
(915) 496-2595

DATE 4/07/97

CHROMATOGRAPHIC GAS ANALYSIS REPORT

MAILEE
26730

DUGAN PRODUCTION CORPORATION
P O BOX 420
FARMINGTON, NM 87499-0420

METER NUMBER 90378 - HANLEY B #1 MV - (N-18-29N-10W)
OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE	2/11/97	TYPE CODE	2 - ACTUAL
SAMPLE DATE	2/07/97	H2S GRAINS	0
EFFECTIVE DATE	3/01/97	LOCATION	F - FARM BECK
EFFECTIVE FOR	6 MONTHS		

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.33	.000
H2S	.00	.000
N2	.41	.000
METHANE	78.68	.000
ETHANE	10.89	2.913
PROPANE	6.01	1.656
ISO-BUTANE	1.16	.379
NORM-BUTANE	1.30	.410
ISO-PENTANE	.42	.154
NORM-PENTANE	.30	.109
HEXANE PLUS	<u>.50</u>	<u>.218</u>
	100.00	5.839

SPECIFIC GRAVITY .734
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1279
RATIO OF SPECIFIC HEATS .000
NO TEST SECURED FOR H2S CONTENT

EL PASO NATURAL GAS COMPANY
VOLUME ACCOUNTING DEPARTMENT
MEASUREMENT DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79978
PHONE: (915) 541-2595

DATE 6/08/96

CHROMATOGRAPHIC GAS ANALYSIS REPORT

MAILEE
26730

DUGAN PRODUCTION CORPORATION
P O BOX 420
FARMINGTON, NM 87499-0420

METER NUMBER 72624 - NCRA #1-D*ko/g (A-3-26N-3W)
OPERATOR 1862 - DUGAN PRODUCTION CORP

ANALYSIS DATE	4/19/96	TYPE CODE	2 - ACTUAL
SAMPLE DATE	4/15/96	H2S GRAINS	0
EFFECTIVE DATE	5/01/96	LOCATION	D - DANIELS FM
EFFECTIVE FOR	6 MONTHS		

COMPONENTS	NORMALIZED MOL %	GPM
CO2	1.18	.000
H2S	.00	.000
N2	.42	.000
METHANE	80.21	.000
ETHANE	10.16	2.718
PROPANE	4.34	1.196
ISO-BUTANE	.77	.252
NORM-BUTANE	1.20	.378
ISO-PENTANE	.50	.183
NORM-PENTANE	.37	.134
HEXANE PLUS	<u>.85</u>	<u>.371</u>
	100.00	5.232

SPECIFIC GRAVITY .729
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1249
RATIO OF SPECIFIC HEATS .000
NO TEST SECURED FOR H2S CONTENT