



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: DU180522
Cust No: 23000-23005

30-045-26730

Well/Lease Information

Customer Name: DUGAN PRODUCTION CORP.
Well Name: SOUTH BISTI FEDERAL 29 - #1; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: GALLUP
Cust. Stn. No.: (FOUR CORNERS EXPLORATION)

Source: CASING
Well Flowing: N
Pressure: 37 PSIG
Flow Temp: DEG. F
Ambient Temp: 62 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/23/2018
Sample Time: 10.20 AM
Sampled By: JIMMY DAVIS
Sampled by (CO): DUGAN

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.3177	2.3307	0.2560	0.00	0.0224
CO2	0.3079	0.3096	0.0530	0.00	0.0047
Methane	68.6501	69.0362	11.6970	693.37	0.3803
Ethane	10.1439	10.2009	2.7270	179.52	0.1053
Propane	9.7010	9.7555	2.6860	244.09	0.1477
Iso-Butane	1.2675	1.2746	0.4170	41.22	0.0254
N-Butane	3.8570	3.8787	1.2220	125.83	0.0774
I-Pentane	1.0363	1.0421	0.3810	41.46	0.0258
N-Pentane	1.1444	1.1508	0.4170	45.88	0.0285
Hexane Plus	1.5742	1.5831	0.7060	82.98	0.0521
Total	100.0000	100.5622	20.5620	1454.33	0.8696

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0053
BTU/CU.FT IDEAL: 1457.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1465.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1440.0
DRY BTU @ 15.025: 1494.8
REAL SPECIFIC GRAVITY: 0.8739

CYLINDER #: 6247
CYLINDER PRESSURE: 40 PSIG
ANALYSIS DATE: 05/24/2018
ANALYSIS TIME: 08:26:01 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 05/24/2018

GC Method: C6+ Gas



DUGAN PRODUCTION CORP.
WELL ANALYSIS COMPARISON

Lease:	SOUTH BISTI FEDERAL 29 - #1; CSG	CASING	05/24/2018
Stn. No.:	(FOUR CORNERS	GALLUP	23000-23005
Mtr. No.:			

Smpl Date:	05/23/2018
Test Date:	05/24/2018
Run No:	DU180522
Nitrogen:	2.3177
CO2:	0.3079
Methane:	68.6501
Ethane:	10.1439
Propane:	9.7010
I-Butane:	1.2675
N-Butane:	3.8570
I-Pentane:	1.0363
N-Pentane:	1.1444
Hexane+:	1.5742
BTU:	1465.5
GPM:	20.5620
SPG:	0.8739



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: DU180521
Cust No: 23000-23000

Well/Lease Information

Customer Name: DUGAN PRODUCTION CORP.
Well Name: SOUTH BISTI FEDERAL 29 - #1; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation: GALLUP
Cust. Stn. No.: (FOUR CORNERS EXPLORATION)

Source: BRADENHEAD
Well Flowing: N
Pressure: 57 PSIG
Flow Temp: DEG. F
Ambient Temp: 67 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 05/23/2018
Sample Time: 10.15 AM
Sampled By: JIMMY DAVIS
Sampled by (CO): DUGAN

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.7326	1.7225	0.1910	0.00	0.0168
CO2	0.0185	0.0184	0.0030	0.00	0.0003
Methane	97.3601	96.7950	16.5340	983.34	0.5393
Ethane	0.7492	0.7449	0.2010	13.26	0.0078
Propane	0.0972	0.0966	0.0270	2.45	0.0015
Iso-Butane	0.0338	0.0336	0.0110	1.10	0.0007
N-Butane	0.0034	0.0034	0.0010	0.11	0.0001
I-Pentane	0.0025	0.0025	0.0010	0.10	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0027	0.0027	0.0010	0.14	0.0001
Total	100.0000	99.4196	16.9700	1000.49	0.5665

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
BTU/CU.FT IDEAL: 1002.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1004.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 987.3
DRY BTU @ 15.025: 1024.9
REAL SPECIFIC GRAVITY: 0.5674

CYLINDER #: 4086
CYLINDER PRESSURE: 59 PSIG
ANALYSIS DATE: 05/24/2018
ANALYSIS TIME: 08:46:41 AM
ANALYSIS RUN BY: SHYANN ELLEDGE

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500 Last Cal/Verify: 05/24/2018

GC Method: C6+ Gas



DUGAN PRODUCTION CORP.
WELL ANALYSIS COMPARISON

Lease: SOUTH BISTI FEDERAL 29 - #1; BHD
Stn. No.: (FOUR CORNERS
Mtr. No.:

BRADENHEAD
GALLUP

05/24/2018
23000-23000

Smpl Date: 05/23/2018
Test Date: 05/24/2018
Run No: DU180521
Nitrogen: 1.7326
CO2: 0.0185
Methane: 97.3601
Ethane: 0.7492
Propane: 0.0972
I-Butane: 0.0338
N-Butane: 0.0034
I-Pentane: 0.0025
N-Pentane: 0.0000
Hexane+: 0.0027
BTU: 1004.8
GPM: 16.9700
SPG: 0.5674