



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

Analysis No: EN170182
Cust No: 25400-11770

Well/Lease Information

Customer Name: ENERVEST
Well Name: ARNSTEIN #1; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004510725

Source: BRADENHEAD
Well Flowing: Y
Pressure: 31 PSIG
Flow Temp: DEG. F
Ambient Temp: 62 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/24/2017
Sample Time: 12.30 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

OIL CONS. DIV DIST. 3

OCT 30 2017

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7312	0.7260	0.0810	0.00	0.0071
CO2	0.0057	0.0057	0.0010	0.00	0.0001
Methane	87.5481	86.9273	14.8810	884.24	0.4849
Ethane	5.8928	5.8510	1.5800	104.28	0.0612
Propane	3.4929	3.4681	0.9650	87.88	0.0532
Iso-Butane	0.8156	0.8098	0.2680	26.52	0.0164
N-Butane	0.8394	0.8334	0.2650	27.38	0.0168
I-Pentane	0.2825	0.2805	0.1040	11.30	0.0070
N-Pentane	0.1678	0.1666	0.0610	6.73	0.0042
Hexane Plus	0.2240	0.2224	0.1000	11.81	0.0074
Total	100.0000	99.2908	18.3060	1160.15	0.6583

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT IDEAL: 1162.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1166.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1145.9
DRY BTU @ 15.025: 1189.6
REAL SPECIFIC GRAVITY: 0.6599

CYLINDER #: 1969
CYLINDER PRESSURE: 31 PSIG
DATE RUN: 10/25/17 12:30 PM
ANALYSIS RUN BY: CAMERON MANGAN

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: 10/25/2017

GC Method: C6+ Gas

2



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

Analysis No: EN170183
Cust No: 25400-11775

Well/Lease Information

Customer Name: ENERVEST
Well Name: ARNSTEIN #1; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004510725

Source: CASING
Well Flowing: Y
Pressure: 79 PSIG
Flow Temp: DEG. F
Ambient Temp: 62 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/24/2017
Sample Time: 12.40 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2765	0.2755	0.0310	0.00	0.0027
CO2	1.0183	1.0146	0.1740	0.00	0.0155
Methane	79.3986	79.1073	13.5120	801.93	0.4398
Ethane	9.3352	9.3009	2.5060	165.21	0.0969
Propane	4.4669	4.4505	1.2350	112.39	0.0680
Iso-Butane	1.0301	1.0263	0.3380	33.50	0.0207
N-Butane	1.5256	1.5200	0.4830	49.77	0.0306
I-Pentane	0.8146	0.8116	0.2990	32.59	0.0203
N-Pentane	0.6661	0.6637	0.2420	26.70	0.0166
Hexane Plus	1.4681	1.4627	0.6570	77.38	0.0486
Total	100.0000	99.6331	19.4770	1299.47	0.7596

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0041
BTU/CU.FT IDEAL: 1302.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1307.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1284.9
DRY BTU @ 15.025: 1333.9
REAL SPECIFIC GRAVITY: 0.7624

CYLINDER #: 12
CYLINDER PRESSURE: 77 PSIG
DATE RUN: 10/25/17 12:40 PM
ANALYSIS RUN BY: CAMERON MANGAN

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

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 10/25/2017