



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

Analysis No: EN170194
Cust No: 25400-11490

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #2; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004510638

OIL CONS. DIV DIST. 3

OCT 30 2017

Source: BRADENHEAD
Well Flowing: Y
Pressure: 8 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: 12.55 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6677	0.6624	0.0740	0.00	0.0065
CO2	1.3728	1.3620	0.2350	0.00	0.0209
Methane	79.6203	78.9917	13.5450	804.17	0.4410
Ethane	10.0757	9.9962	2.7040	178.31	0.1046
Propane	4.2835	4.2497	1.1840	107.78	0.0652
Iso-Butane	0.7577	0.7517	0.2490	24.64	0.0152
N-Butane	1.2215	1.2119	0.3860	39.85	0.0245
I-Pentane	0.5022	0.4982	0.1840	20.09	0.0125
N-Pentane	0.4162	0.4129	0.1510	16.68	0.0104
Hexane Plus	1.0824	1.0739	0.4840	57.05	0.0358
Total	100.0000	99.2106	19.1960	1248.57	0.7366

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT IDEAL: 1251.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1256.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1234.2
DRY BTU @ 15.025: 1281.3
REAL SPECIFIC GRAVITY: 0.739

CYLINDER #: 4101
CYLINDER PRESSURE: 11 PSIG
DATE RUN: 10/25/17 12:00 AM
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



ENERVEST
WELL ANALYSIS COMPARISON

Lease: SOUTHERN UNION #2; BHD
Str. No.:
Mtr. No.:

BRADENHEAD

10/25/2017
25400-11490

Smpl Date:	10/24/2017	02/12/2015
Test Date:	10/25/2017	02/24/2015
Run No:	EN170194	EN150065
Nitrogen:	0.6677	0.3440
CO2:	1.3728	2.7480
Methane:	79.6203	77.4400
Ethane:	10.0757	9.6040
Propane:	4.2835	4.4310
I-Butane:	0.7577	0.8330
N-Butane:	1.2215	1.5340
I-Pentane:	0.5022	0.7640
N-Pentane:	0.4162	0.6700
Hexane+:	1.0824	1.6320
BTU:	1256.1	1292.4
GPM:	19.1960	19.5100
SPG:	0.7390	0.7813



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

Analysis No: EN170195
Cust No: 25400-11495

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #2; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004510638

OIL CONS. DIV DIST. 3

OCT 30 2017

Source: CASING
Well Flowing: Y
Pressure: 74 PSIG
Flow Temp: DEG. F
Ambient Temp: 63 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/24/2017
Sample Time: 1.10 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3453	0.3434	0.0380	0.00	0.0033
CO2	2.1507	2.1387	0.3680	0.00	0.0327
Methane	78.2196	77.7839	13.3100	790.02	0.4333
Ethane	10.1898	10.1330	2.7350	180.33	0.1058
Propane	4.3561	4.3318	1.2050	109.60	0.0663
Iso-Butane	0.7631	0.7588	0.2510	24.82	0.0153
N-Butane	1.2948	1.2876	0.4100	42.24	0.0260
I-Pentane	0.5847	0.5814	0.2150	23.39	0.0146
N-Pentane	0.5044	0.5016	0.1840	20.22	0.0126
Hexane Plus	1.5915	1.5826	0.7120	83.89	0.0527
Total	100.0000	99.4428	19.4280	1274.51	0.7625

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1277.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1282.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1260.3
DRY BTU @ 15.025: 1308.3
REAL SPECIFIC GRAVITY: 0.7652

CYLINDER #: 6075
CYLINDER PRESSURE: 79 PSIG
DATE RUN: 10/25/17 12:00 AM
ANALYSIS RUN BY: RICHARD WILSON

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



ENERVEST

WELL ANALYSIS COMPARISON

Lease: SOUTHERN UNION #2; CSG
Stn. No.:
Mtr. No.:

CASING

10/25/2017
25400-11495

Smpl Date:	10/24/2017	02/12/2015
Test Date:	10/25/2017	02/24/2015
Run No:	EN170195	EN150066
Nitrogen:	0.3453	0.3540
CO2:	2.1507	3.2690
Methane:	78.2196	75.0707
Ethane:	10.1898	10.0391
Propane:	4.3561	4.9850
I-Butane:	0.7631	1.0160
N-Butane:	1.2948	1.9390
I-Pentane:	0.5847	0.9540
N-Pentane:	0.5044	0.8260
Hexane+:	1.5915	1.5470
BTU:	1282.6	1319.3
GPM:	19.4280	19.7460
SPG:	0.7652	0.8071
