



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

Analysis No: EN170206
Cust No: 25400-11480

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #1C; BHD
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004531069

Source: BRADENHEAD
Well Flowing: Y
Pressure: 11 PSIG
Flow Temp: DEG. F
Ambient Temp: 68 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/25/2017
Sample Time: 9.21 AM
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	1.1296	1.1045	0.1250	0.00	0.0109
CO2	0.0161	0.0157	0.0030	0.00	0.0002
Methane	82.6804	80.8434	14.0570	835.07	0.4580
Ethane	9.3191	9.1120	2.4990	164.92	0.0968
Propane	4.9745	4.8640	1.3740	125.16	0.0757
Iso-Butane	0.7107	0.6949	0.2330	23.11	0.0143
N-Butane	0.7153	0.6994	0.2260	23.34	0.0144
I-Pentane	0.1542	0.1508	0.0570	6.17	0.0038
N-Pentane	0.1057	0.1034	0.0380	4.24	0.0026
Hexane Plus	0.1944	0.1901	0.0870	10.25	0.0064
Total	100.0000	97.7782	18.6990	1192.26	0.6831

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT IDEAL: 1195.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1198.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1177.8
DRY BTU @ 15.025: 1222.7
REAL SPECIFIC GRAVITY: 0.685

CYLINDER #: 4159
CYLINDER PRESSURE: 12 PSIG
DATE RUN: 10/26/17 9:21 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: 10/26/2017

GC Method: C6+ Gas

6



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

**** 10 PSIG Precharge ****

C6+ ☒ C9+ ☐ C12+ ☐ C12+ BTEX ☐ Helium ☐

Other

Date 10/25/17

Sampled By: (Co.) Ever Vest

Time

☐ AM
☒ PM

Sampled by: (Person) Leroy Martinez

Well Flowing: ☒ Yes ☐ No

Company: Ever Vest

Heat Trace: ☐ Yes ☐ No

Well Name: Southern Union #1C

Flow Pressure (PSIG): 113

Location:

Flow Temp (°F): N/A

County/State: SAN JUAN NM

Ambient Temp (°F): 68°

Formation:

Flow Rate (MCF/D): N/A

Source: ☐ Meter Run ☐ Tubing ☐ Casing ☒ Bradenhead ☐ Other

Sample Type: ☒ Spot ☐ Composite Sample Method: ☒ Purge & Fill ☐ Other

Meter Number:

Cylinder Number: 4159

Contact: Leroy Martinez 793-3217

Remarks: API # 300 453/069



ENERVEST
WELL ANALYSIS COMPARISON

Lease: SOUTHERN UNION #1C; BHD
Stn. No.: API 3004531069
Mtr. No.:

BRADENHEAD

10/26/2017
25400-11480

Smpl Date:	10/25/2017	02/13/2015
Test Date:	10/26/2017	02/24/2015
Run No:	EN170206	EN150063
Nitrogen:	1.1296	0.7560
CO2:	0.0161	0.0040
Methane:	82.6804	79.3562
Ethane:	9.3191	10.0699
Propane:	4.9745	6.3869
I-Butane:	0.7107	1.1860
N-Butane:	0.7153	1.3060
I-Pentane:	0.1542	0.3700
N-Pentane:	0.1057	0.2580
Hexane+:	0.1944	0.3070
BTU:	1198.7	1270.4
GPM:	18.6990	19.2180
SPG:	0.6850	0.7269



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

Analysis No: EN170207
Cust No: 25400-11485

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #1C; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004531069

OIL CONS. DIV DIST. 3

OCT 30 2017

Source: CASING
Well Flowing: Y
Pressure: 70 PSIG
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/25/2017
Sample Time: 9.22 AM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4686	0.4530	0.0520	0.00	0.0045
CO2	0.6461	0.6246	0.1110	0.00	0.0098
Methane	78.8618	76.2410	13.4180	796.50	0.4368
Ethane	10.6672	10.3127	2.8630	188.78	0.1107
Propane	4.7033	4.5470	1.3000	118.34	0.0716
Iso-Butane	0.7702	0.7446	0.2530	25.05	0.0155
N-Butane	1.4437	1.3957	0.4570	47.10	0.0290
I-Pentane	0.6103	0.5900	0.2240	24.42	0.0152
N-Pentane	0.5549	0.5365	0.2020	22.24	0.0138
Hexane Plus	1.2739	1.2316	0.5700	67.15	0.0422
Total	100.0000	96.6767	19.4500	1289.58	0.7491

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
BTU/CU.FT IDEAL: 1292.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1297.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1275.0
DRY BTU @ 15.025: 1323.6
REAL SPECIFIC GRAVITY: 0.7518

CYLINDER #: 6036
CYLINDER PRESSURE: 70 PSIG
DATE RUN: 10/26/17 9:22 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: 10/26/2017

GC Method: C6+ Gas



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

****10 PSIG Precharge****

C6+ ☒ C9+ ☐ C12+ ☐ C12+ BTEX ☐ Helium ☐

Other ☐

Date 10/25/17

☐ AM
☐ PM

Sampled By: (Co.) EverVest

Time

Sampled by: (Person) Leroy Martinez

Well Flowing: ☒ Yes ☐ No

Company: EverVest

Heat Trace: ☐ Yes ☐ No

Well Name: Southern Union #1C

Flow Pressure (PSIG): 70.2

Location:

Flow Temp (°F): N/A

County/State: SAN JUAN NM

Ambient Temp (°F): 69°

Formation:

Flow Rate (MCF/D): N/A

Source: ☐ Meter Run ☐ Tubing ☒ Casing ☐ Bradenhead ☐ Other

Sample Type: ☒ Spot ☐ Composite Sample Method: ☒ Purge & Fill ☐ Other

Meter Number:

Cylinder Number: 6036

Contact: Leroy Martinez 793-3217

Remarks: API # 3004531069



ENERVEST
WELL ANALYSIS COMPARISON

Lease: SOUTHERN UNION #1C; CSG CASING 10/26/2017
Stn. No.: API 3004531069 25400-11485
Mtr. No.:

Smpl Date:	10/25/2017	02/13/2015
Test Date:	10/26/2017	02/24/2015
Run No:	EN170207	EN150064
Nitrogen:	0.4686	0.3470
CO2:	0.6461	0.4830
Methane:	78.8618	80.8260
Ethane:	10.6672	10.5060
Propane:	4.7033	4.4070
I-Butane:	0.7702	0.7300
N-Butane:	1.4437	1.2600
I-Pentane:	0.6103	0.4780
N-Pentane:	0.5549	0.3810
Hexane+:	1.2739	0.5820
BTU:	1297.6	1250.3
GPM:	19.4500	19.1180
SPG:	0.7518	0.7174