



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

Analysis No: SO170052
Cust No: 15950-10250

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: ULIBARRI GC 003 BHD
County/State: SAN JUAN NM
Location: UNIT N SEC 35 TNSH 30 RNG 9
Field:
Formation: DK
Cust. Stn. No.: 3004508890

Source: BRADENHEAD
Well Flowing: Y
Pressure: 120 PSIA
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 07/18/2017
Sample Time: 2.41 PM
Sampled By: MATTHEW YAZZIE
Sampled by (CO): SABRE BEEBE

OIL CONS. DIV DIST. 3

JAN 02 2018

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	97.6895	10.7500	0.00	0.9449
CO2	0.9883	0.1690	0.00	0.0150
Methane	0.0981	0.0170	0.99	0.0005
Ethane	0.0586	0.0160	1.04	0.0006
Propane	0.0191	0.0050	0.48	0.0003
Iso-Butane	0.0204	0.0070	0.66	0.0004
N-Butane	0.0436	0.0140	1.42	0.0009
I-Pentane	0.0341	0.0120	1.36	0.0008
N-Pentane	0.0000	0.0000	0.00	0.0000
Hexane Plus	1.0483	0.4680	55.26	0.0347
Total	100.0000	11.4580	61.22	0.9981

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0005
BTU/CU.FT IDEAL: 61.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 61.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 60.3
DRY BTU @ 15.025: 62.6
REAL SPECIFIC GRAVITY: 0.9982

CYLINDER #: 7078
CYLINDER PRESSURE: 120 PSIG
DATE RUN: 8/3/17 2:41 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: 10/02/2017

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: ULIBARRI GC 003 BHD
Stn. No.:
Mtr. No.: 3004508890

BRADENHEAD
DK

10/02/2017
15950-10250

Smpl Date: 07/18/2017
Test Date: 08/03/2017
Run No: SO170052

Nitrogen: 97.6895
CO2: 0.9883
Methane: 0.0981
Ethane: 0.0586
Propane: 0.0191
I-Butane: 0.0204
N-Butane: 0.0436
I-Pentane: 0.0341
N-Pentane: 0.0000
Hexane+: 1.0483

BTU: 61.4
GPM: 11.4580
SPG: 0.9982



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

Analysis No: SO170053
Cust No: 15950-10255

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: ULIBARRI GC 003 CSG
County/State: SAN JUAN NM
Location: UNIT N SEC 35 TNSH 30 RNG 9
Field:
Formation: DK
Cust. Stn. No.: 3004508890

OIL CONS. DIV DIST. 3
JAN-02-2018

Source: CASING
Well Flowing: Y
Pressure: 96 PSIA
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 07/18/2017
Sample Time: 2.43 PM
Sampled By: MATTHEW YAZZIE
Sampled by (CO): SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	52.2637	5.7550	0.00	0.5055
CO2	0.8629	0.1470	0.00	0.0131
Methane	44.6631	7.5780	451.10	0.2474
Ethane	1.5654	0.4190	27.70	0.0163
Propane	0.2096	0.0580	5.27	0.0032
Iso-Butane	0.0297	0.0100	0.97	0.0006
N-Butane	0.0409	0.0130	1.33	0.0008
I-Pentane	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.3647	0.1630	19.22	0.0121
Total	100.0000	14.1430	505.60	0.7989

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0011
BTU/CU.FT IDEAL: 506.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 507.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 498.5
DRY BTU @ 15.025: 517.5
REAL SPECIFIC GRAVITY: 0.7995

CYLINDER #: 7004
CYLINDER PRESSURE: 107 PSIG
DATE RUN: 8/3/17 2:43 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: 10/02/2017



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: ULIBARRI GC 003 CSG
Stn. No.:
Mtr. No.: 3004508890

CASING
DK

10/02/2017
15950-10255

Smpl Date: 07/18/2017
Test Date: 08/03/2017
Run No: SO170053

Nitrogen: 52.2637
CO2: 0.8629
Methane: 44.6631
Ethane: 1.5654
Propane: 0.2096
I-Butane: 0.0297
N-Butane: 0.0409
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.3647

BTU: 507.3
GPM: 14.1430
SPG: 0.7995



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

Analysis No: SO170054
Cust No: 15950-10260

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: ULIBARRI GC 003 TBG
County/State: SAN JUAN NM
Location: UNIT N SEC 35 TNSH 30 RNG 9
Field:
Formation: DK
Cust. Stn. No.: 3004508890

OIL CONS. DIV DIST. 3

JAN 10 2018

Source: TUBING
Well Flowing: Y
Pressure: 94 PSIA
Flow Temp: DEG. F
Ambient Temp: 80 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 07/19/2017
Sample Time: 2.44 PM
Sampled By: MATTHEW YAZZIE
Sampled by (CO): SABRE BEEBE

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1769	0.0200	0.00	0.0017
CO2	2.0799	0.3560	0.00	0.0316
Methane	92.5575	15.7270	934.83	0.5127
Ethane	3.2636	0.8750	57.76	0.0339
Propane	0.8021	0.2210	20.18	0.0122
Iso-Butane	0.2771	0.0910	9.01	0.0056
N-Butane	0.1893	0.0600	6.18	0.0038
I-Pentane	0.1403	0.0510	5.61	0.0035
N-Pentane	0.0626	0.0230	2.51	0.0016
Hexane Plus	0.4507	0.2010	23.76	0.0149
Total	100.0000	17.6250	1059.83	0.6214

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
BTU/CU.FT IDEAL: 1062.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1064.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1046.4
DRY BTU @ 15.025: 1086.2
REAL SPECIFIC GRAVITY: 0.6227

CYLINDER #: 7038
CYLINDER PRESSURE: 88 PSIG
DATE RUN: 8/3/17 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: 10/02/2017

GC Method: C6+ Gas



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: ULIBARRI GC 003 TBG
Stn. No.:
Mtr. No.: 3004508890

TUBING
DK

10/02/2017
15950-10260

Smpl Date: 07/19/2017
Test Date: 08/03/2017
Run No: SO170054

Nitrogen: 0.1769
CO2: 2.0799
Methane: 92.5575
Ethane: 3.2636
Propane: 0.8021
I-Butane: 0.2771
N-Butane: 0.1893
I-Pentane: 0.1403
N-Pentane: 0.0626
Hexane+: 0.4507

BTU: 1064.9
GPM: 17.6250
SPG: 0.6227



NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONS. DIV DIST. 3

APPROVED 2-2018

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NM 87410
(505) 334-6178 FAX: (505) 334-6170
<http://www.emnrd.state.nm.us/ocd/>

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test 07/19/17 Operator BP America Production Company API # 3004508890

Property Name ULIBARRI GC 003-DK Location: Unit N Section 35 Township 30 Range 9

(Well Name and Number)

Pressure (Shut-in or Producing) Tubing 94.3 Intermediate 0 Casing 96.2 Bradenhead 120

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate		Bradenhead Flowed	Intermediate Flowed
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor		
5 minutes	0	103.4	0	0	106.7	Steady Flow	
10 minutes	0	106.3	0	0	108.7	Surges	
15 minutes	0	107.7	0	0	110.6	Down to Nothing	2 sec
20 minutes	0	91.4	0			No Flow	0
25 minutes	0	98.3	0			Gas	
30 minutes	0	102.3	0			Gas and Water	
5 minute SI	7.8			0		Water	

If bradenhead flowed water, check all of the descriptions that apply below:

Clear _____ Fresh _____ Salty _____ Sulfur _____ Black _____

REMARKS:

No compressor on location Casing closed well started flowing 16 minutes into testing of bradenhead. Pulled gas samples on all strings - tubing, casing, and bradenhead.

By Matthew Yazzie Witness _____

NMOCD Test Area: A