Well Name: Childers 5R
API# 30 - 045 - 25351
Casing Sampled: Bradenhead
Sample Type GAS

(505) 325-6622

Analysis No: SO190047
Cust No: 15950-10135

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	BRADENHEAD
Well Name:	CHILDERS 5R; BHD	Well Flowing:	Y
County/State:	NM	Pressure:	66 PSIA
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	85 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
	API 3004525351	Sample Date:	06/13/2019
		Sample Time:	1.27 PM
		Sampled By:	EUGENIA HAMILTON
Heat Trace:	N	Sampled by (CO):	KEVIN IRELAND
Remarks:			

NMOCD
DISTRICT III

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	5.4770	5.4113	0.6040	0.00	0.0530
CO2	0.0063	0.0062	0.0010	0.00	0.0001
Methane	87.4848	86.4362	14.8620	883.60	0.4846
Ethane	4.6101	4.5548	1.2350	81.58	0.0479
Propane	1.3368	1.3208	0.3690	33.64	0.0204
Iso-Butane	0.3115	0.3078	0.1020	10.13	0.0063
N-Butane	0.2858	0.2824	0.0900	9.32	0.0057
I-Pentane	0.1045	0.1032	0.0380	4.18	0.0026
N-Pentane	0.0482	0.0476	0.0180	1.93	0.0012
Hexane Plus	0.3350	0.3310	0.1500	17.66	0.0111
Total	100.0000	98.8013	17.4690	1042.04	0.6327

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0023	CYLINDER #:	7049
BTU/CU.FT IDEAL:	1044.5	CYLINDER PRESSURE:	71 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1046.9	ANALYIS DATE:	06/20/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1028.7	ANALYIS TIME:	10:56:58 AM
DRY BTU @ 15.025:	1067.9	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6339		

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: 06/25/2019**
GC Method: C6+ Gas

BP - SOUTH BHD PROJECT

WELL ANALYSIS COMPARISON

Lease:	CHILDERS 5R; BHD	BRADENHEAD	06/25/2019
Stn. No.:		MV	15950-10135
Mtr. No.:	API 3004525351		

Smpl Date:	06/13/2019	06/22/2017
Test Date:	06/20/2019	06/22/2017
Run No:	SO190047	SO170023
Nitrogen:	5.4770	6.4541
CO2:	0.0063	0.0281
Methane:	87.4848	86.7883
Ethane:	4.6101	4.5087
Propane:	1.3368	1.2962
I-Butane:	0.3115	0.2894
N-Butane:	0.2858	0.2713
I-Pentane:	0.1045	0.1025
N-Pentane:	0.0482	0.0613
Hexane+:	0.3350	0.2000
BTU:	1046.9	1029.1
GPM:	17.4690	17.3560
SPG:	0.6339	0.6333

Well Name: Childers 5 R
API# 30 - 045 - 25351
Casing Sampled: Production
Sample Type Gas

(505) 325-6622

Analysis No: SO190048
Cust No: 15950-10170

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	CASING
Well Name:	CHILDERS 5R; CSG	Well Flowing:	Y
County/State:	NM	Pressure:	51 PSIA
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	85 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
	API 3004525351	Sample Date:	06/13/2019
		Sample Time:	1.30 PM
		Sampled By:	EUGENIA HAMILTON
Heat Trace:	N	Sampled by (CO):	KEVIN IRELAND
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5431	0.5316	0.0600	0.00	0.0053
CO2	0.0983	0.0962	0.0170	0.00	0.0015
Methane	88.1760	86.3117	14.9880	890.58	0.4884
Ethane	6.2846	6.1517	1.6850	111.22	0.0652
Propane	2.7244	2.6668	0.7530	68.55	0.0415
Iso-Butane	0.5389	0.5275	0.1770	17.52	0.0108
N-Butane	0.6488	0.6351	0.2050	21.17	0.0130
I-Pentane	0.2280	0.2232	0.0840	9.12	0.0057
N-Pentane	0.1583	0.1550	0.0580	6.35	0.0039
Hexane Plus	0.5996	0.5869	0.2680	31.61	0.0198
Total	100.0000	97.8857	18.2950	1156.11	0.6552

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0029	CYLINDER #:	7031
BTU/CU.FT IDEAL:	1158.8	CYLINDER PRESSURE:	48 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1162.2	ANALYIS DATE:	06/20/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1142.0	ANALYIS TIME:	10:28:42 AM
DRY BTU @ 15.025:	1185.5	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6568		

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: 06/25/2019**
GC Method: C6+ Gas

BP - SOUTH BHD PROJECT

WELL ANALYSIS COMPARISON

Lease:	CHILDERS 5R; CSG	CASING	06/25/2019
Stn. No.:		MV	15950-10170
Mtr. No.:	API 3004525351		

Smpl Date:	06/13/2019	06/22/2017
Test Date:	06/20/2019	06/22/2017
Run No:	SO190048	SO170024
Nitrogen:	0.5431	30.4707
CO2:	0.0983	0.7365
Methane:	88.1760	59.0863
Ethane:	6.2846	5.8329
Propane:	2.7244	2.0219
I-Butane:	0.5389	0.2953
N-Butane:	0.6488	0.5350
I-Pentane:	0.2280	0.2119
N-Pentane:	0.1583	0.1668
Hexane+:	0.5996	0.6427
BTU:	1162.2	830.5
GPM:	18.2950	16.3310
SPG:	0.6568	0.7731

Well Name: Childers 5R
API# 30-045-25351
Casing Sampled: Tubing
Sample Type Gas

Analysis No: SO190049
Cust No: 15950-10150

Well/Lease Information

Customer Name:	BP - SOUTH BHD PROJECT	Source:	TUBING
Well Name:	CHILDERS 5R; TBG	Well Flowing:	Y
County/State:	NM	Pressure:	29 PSIA
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	85 DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
	API 3004525351	Sample Date:	06/13/2019
		Sample Time:	1.27 PM
		Sampled By:	EUGENIA HAMILTON
Heat Trace:	N	Sampled by (CO):	KEVIN IRELAND
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2484	0.2432	0.0270	0.00	0.0024
CO2	1.6567	1.6220	0.2840	0.00	0.0252
Methane	80.6873	78.9963	13.7270	814.94	0.4469
Ethane	9.0259	8.8367	2.4220	159.73	0.0937
Propane	4.0987	4.0128	1.1330	103.13	0.0624
Iso-Butane	0.7191	0.7040	0.2360	23.38	0.0144
N-Butane	1.2954	1.2683	0.4100	42.26	0.0260
I-Pentane	0.4829	0.4728	0.1770	19.32	0.0120
N-Pentane	0.3929	0.3847	0.1430	15.75	0.0098
Hexane Plus	1.3927	1.3635	0.6230	73.41	0.0461
Total	100.0000	97.9043	19.1820	1251.93	0.7389

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0038	CYLINDER #:	7040
BTU/CU.FT IDEAL:	1254.8	CYLINDER PRESSURE:	27 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1259.6	ANALYIS DATE:	06/20/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1237.7	ANALYIS TIME:	03:52:02 PM
DRY BTU @ 15.025:	1284.8	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7415		

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: 06/25/2019**
GC Method: C6+ Gas

BP - SOUTH BHD PROJECT

WELL ANALYSIS COMPARISON

Lease:	CHILDERS 5R; TBG	TUBING	06/25/2019
Stn. No.:		MV	15950-10150
Mtr. No.:	API 3004525351		

Smpl Date:	06/13/2019	06/22/2017
Test Date:	06/20/2019	06/22/2017
Run No:	SO190049	SO170025
Nitrogen:	0.2484	0.2370
CO2:	1.6567	1.7282
Methane:	80.6873	80.0739
Ethane:	9.0259	9.1180
Propane:	4.0987	4.2557
I-Butane:	0.7191	0.7803
N-Butane:	1.2954	1.4028
I-Pentane:	0.4829	0.5603
N-Pentane:	0.3929	0.4479
Hexane+:	1.3927	1.3958
BTU:	1259.6	1270.0
GPM:	19.1820	19.2630
SPG:	0.7415	0.7492