



BRADENHEAD TEST REPORT

Step 1. Before opening any valves, record all tubing and casing pressures as found.
Step 2. Collect liquid and gas samples as required; consult Bradenhead Testing and Reporting Instructions and Guidance for field specific Orders at <http://cogcc/reg.html#/opguidance>
Step 3. Conduct Bradenhead test.
Step 4. Submit Form 17 within 10 days of test. Attach a wellbore diagram if not previously submitted or if wellbore configuration has changed since last wellbore diagram was submitted.
Step 5. Submit sample analytical results via Form 43.

1. OGCC Operator Number: 10133 3. BLM Lease No: _____
2. Name of Operator: HILCORP ENERGY COMPANY
4. API Number: 05-067-06749-00 5. Multiple completion? ☐ Yes ☐ No
6. Well Name: TIFFANY 3-M Number: 2
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWSW,35,33N,7W,N
8. County LA PLATA 9. Field Name: IGNACIO BLANCO
10. Minerals: ☐ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 08/22/2023

12. Well Status: ☒ Flowing☐ Shut In ☐ Gas Lift☐ Pumping ☐ Injection☐ Clock/Intermitter☐ Plunger Lift

13. Number of Casing Strings:

☐ Two ☒ Three ☐ Liner?

14. EXISTING PRESSURES

Record all pressures as found	Tubing: 132 Fm: _____	Tubing: _____ Fm: _____	Prod Csg 133 Fm: _____	Intermediate Csg: 59	Surf. Csg 59
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BRADENHEAD TEST

With gauges monitoring production, intermediate casing and tubing pressures, open surface casing (Bradenhead) valve (if no intermediate casing, monitor only the production casing and tubing pressures.) Record pressures at five minute intervals.

Describe character of flow in "Bradenhead Flow" column: O = No Flow; C = Continuous; D = Down to 0; S = Surge; W = Whisper

Describe fluid type in "Bradenhead Fluid" column: H = Water H₂O; M = Mud; G = Gas; V = Vapor; L = Liquid Hydrocarbon; H & M = Water & Mud; H & G = Water & Gas; H & V = Water & Vapor; M & G = Mud & Gas; M & V = Mud & Vapor; G & V = Gas & Vapor; H & L = Water & Liquid Hydrocarbon; M & L = Mud & Liquid Hydrocarbon; G & L = Gas & Liquid Hydrocarbon; V & L = Vapor & Liquid Hydrocarbon; N = None

Buried valve? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	00:00	132		133	59	CONTINUOUS	
BRADENHEAD SAMPLE TAKEN?	05:00	141		142	22	CONTINUOUS	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Liquid	10:00	144		144	5	CONTINUOUS	
Character of Bradenhead fluid:	15:00	146		147	1	CONTINUOUS	
<input type="checkbox"/> Clear <input type="checkbox"/> Fresh	20:00	148		148	1	CONTINUOUS	
<input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black	25:00	149		150	1	CONTINUOUS	
Other:(describe)	30:00	150		151	1	CONTINUOUS	
REQUIRED - Instantaneous Bradenhead Pressure at End of Test: 1 PSIG							

INTERMEDIATE CASING TEST

With gauges monitoring production, intermediate casing and tubing pressures, open the intermediate casing valve. Record pressures at five minute intervals.

Describe character of flow in "Intermediate Flow" column: O = No Flow; C = Continuous; D = Down to 0; S = Surge; W = Whisper

Describe fluid type in "Intermediate Fluid" column: H = Water H₂O; M = Mud; G = Gas; V = Vapor; L = Liquid Hydrocarbon; H & M = Water & Mud; H & G = Water & Gas; H & V = Water & Vapor; M & G = Mud & Gas; M & V = Mud & Vapor; G & V = Gas & Vapor; H & L = Water & Liquid Hydrocarbon; M & L = Mud & Liquid Hydrocarbon; G & L = Gas & Liquid Hydrocarbon; V & L = Vapor & Liquid Hydrocarbon; N = None.

Buried valve? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermediate Csg PSIG	Intermediate Flow:	Intermediate Fluid:
	00:00	152		152	1	CONTINUOUS	
INTERMEDIATE SAMPLE TAKEN? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Liquid	05:00	153		153	1	WHISPER	
	10:00	153		154	1	WHISPER	
	15:00	154		155	1	WHISPER	
	20:00	154		155	0	DOWN TO 0	
Character of Intermediate fluid: <input type="checkbox"/> Clear <input type="checkbox"/> Fresh <input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black Other:(describe) _____ _____	25:00	155		156	0	NO FLOW	
	30:00	155		156	0	NO FLOW	
	REQUIRED - Instantaneous Intermediate Casing Pressure at End of Test: <u>0</u> PSIG						

Comments:

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Test Performed By: Steven Walters Title: Operator Phone: ()

Signed: Priscilla Shorty Title: OperationsRegulatory
Tech Date: 9/5/2023

Witnessed By: _____ Title: _____ Agency: _____



Well Name: TIFFANY 3M 2; BHD
API #: 506706749
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS20230245
Cust No: 35825-12200

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: TIFFANY 3M 2; BHD
County/State: LA PLATA CO
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: 506706749
0130101

Source: BRADENHEAD
Well Flowing: Y
Pressure: 52 PSIG
Flow Temp: 72 DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: 70 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/22/2023
Sample Time: 8.10 AM
Sampled By: STEVE WALTERS
Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0938	0.0945	0.0100	0.00	0.0009
CO2	0.3962	0.3992	0.0680	0.00	0.0060
Methane	97.9406	98.6829	16.6350	989.20	0.5425
Ethane	1.1962	1.2053	0.3200	21.17	0.0124
Propane	0.2264	0.2281	0.0620	5.70	0.0034
Iso-Butane	0.0518	0.0522	0.0170	1.68	0.0010
N-Butane	0.0326	0.0328	0.0100	1.06	0.0007
I-Pentane	0.0071	0.0072	0.0030	0.28	0.0002
N-Pentane	0.0025	0.0025	0.0010	0.10	0.0001
Hexane Plus	0.0528	0.0532	0.0240	2.78	0.0017
Total	100.0000	100.7579	17.1500	1021.98	0.5690

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 1024.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1026.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1008.6
DRY BTU @ 15.025: 1047.1
REAL SPECIFIC GRAVITY: 0.5699

CYLINDER #: 4079
CYLINDER PRESSURE: 60 PSIG
ANALYSIS DATE: 08/25/2023
ANALYSIS TIME: 12:22:53 AM
ANALYSIS RUN BY: SARAH BALLARD

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: 09/01/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: TIFFANY 3M 2; BHD
Stn. No.: 506706749
Mtr. No.: 0130101

BRADENHEAD

09/01/2023
35825-12200

Smpl Date:	08/22/2023	06/02/2022	09/15/2021	08/18/2021	09/16/2020	06/05/2020
Test Date:	08/25/2023	06/09/2022	09/21/2021	08/27/2021	09/21/2020	06/09/2020
Run No:	HS20230245	HS20220104	HS2021244	HS2021204	HS200287	HS200039
Nitrogen:	0.0938	0.1242	0.0961	0.1028	0.1036	0.1028
CO2:	0.3962	0.0856	0.2760	0.3862	0.3139	0.6552
Methane:	97.9406	98.4615	98.3619	98.2632	98.0738	98.1041
Ethane:	1.1962	1.0232	0.9576	0.9644	1.1726	0.8745
Propane:	0.2264	0.1912	0.1770	0.1754	0.2272	0.1501
I-Butane:	0.0518	0.0408	0.0393	0.0380	0.0480	0.0633
N-Butane:	0.0326	0.0255	0.0246	0.0231	0.0268	0.0197
I-Pentane:	0.0071	0.0070	0.0069	0.0051	0.0055	0.0044
N-Pentane:	0.0025	0.0022	0.0027	0.0017	0.0014	0.0000
Hexane+:	0.0528	0.0388	0.0579	0.0401	0.0272	0.0259
BTU:	1026.5	1026.5	1024.9	1022.8	1025.7	1018.8
GPM:	17.1500	17.1210	17.1210	17.1120	17.1380	17.1010
SPG:	0.5699	0.5652	0.5670	0.5675	0.5682	0.5693



Well Name: TIFFANY 3M 2; INTRM
API #: 506706749
Source: INTERMEDIATE CASING
Sample Type: GAS
Analysis No: HS20230247
Cust No: 35825-13270

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	TIFFANY 3M 2; INTRM CASING	Well Flowing:	Y
County/State:	LA PLATA CO	Pressure:	52 PSIG
Location:		Flow Temp:	72 DEG. F
Lease/PA/CA:		Ambient Temp:	70 DEG. F
Formation:	MV	Flow Rate:	70 MCF/D
Cust. Stn. No.:	506706749	Sample Method:	Purge & Fill
	0130101	Sample Date:	08/22/2023
	AREA 5 / RUN 0510	Sample Time:	8.05 AM
Heat Trace:	N	Sampled By:	STEVE WALTERS
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1021	0.1028	0.0110	0.00	0.0010
CO2	0.1482	0.1493	0.0250	0.00	0.0023
Methane	97.8757	98.5825	16.6240	988.54	0.5421
Ethane	1.3952	1.4053	0.3740	24.69	0.0145
Propane	0.2925	0.2946	0.0810	7.36	0.0045
Iso-Butane	0.0642	0.0647	0.0210	2.09	0.0013
N-Butane	0.0450	0.0453	0.0140	1.47	0.0009
I-Pentane	0.0129	0.0130	0.0050	0.52	0.0003
N-Pentane	0.0049	0.0049	0.0020	0.20	0.0001
Hexane Plus	0.0593	0.0597	0.0260	3.13	0.0020
Total	100.0000	100.7221	17.1830	1027.99	0.5689

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	4065
BTU/CU.FT IDEAL:	1030.4	CYLINDER PRESSURE:	59 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1032.5	ANALYSIS DATE:	08/25/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1014.5	ANALYSIS TIME:	12:32:26 AM
DRY BTU @ 15.025:	1053.2	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.5699		

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: 09/01/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	TIFFANY 3M 2; INTRM CASING	INTERMEDIATE CASING	09/01/2023
Stn. No.:	506706749	MV	35825-13270
Mtr. No.:	0130101		

Smpl Date:	08/22/2023	06/02/2022	09/15/2021	08/18/2021	09/16/2020
Test Date:	08/25/2023	06/09/2022	09/21/2021	08/27/2021	09/21/2020
Run No:	HS20230247	HS20220105	HS2021246	HS2021206	HS200289
Nitrogen:	0.1021	0.1331	0.1126	0.1001	0.1030
CO2:	0.1482	0.0836	0.2334	0.1492	0.0184
Methane:	97.8757	98.1746	98.2415	98.2821	98.2507
Ethane:	1.3952	1.1710	1.0426	1.1103	1.2458
Propane:	0.2925	0.2433	0.2065	0.2224	0.2464
I-Butane:	0.0642	0.0487	0.0433	0.0478	0.0518
N-Butane:	0.0450	0.0352	0.0281	0.0324	0.0309
I-Pentane:	0.0129	0.0129	0.0101	0.0109	0.0078
N-Pentane:	0.0049	0.0052	0.0039	0.0044	0.0028
Hexane+:	0.0593	0.0924	0.0780	0.0404	0.0424
BTU:	1032.5	1031.3	1027.4	1027.8	1030.5
GPM:	17.1830	17.1590	17.1370	17.1380	17.1530
SPG:	0.5699	0.5684	0.5681	0.5668	0.5665



Well Name: TIFFANY 3M 2; CSG

API #: 506706749

Source: CASING

Sample Type: GAS

Analysis No: HS20230246

Cust No: 35825-12205

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: TIFFANY 3M 2; CSG

County/State: LA PLATA CO

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 506706749
0130101

AREA 5 / RUN 0510

Heat Trace: N

Remarks:

Source: CASING

Well Flowing: Y

Pressure: 52 PSIG

Flow Temp: 72 DEG. F

Ambient Temp: 70 DEG. F

Flow Rate: 70 MCF/D

Sample Method: Purge & Fill

Sample Date: 08/22/2023

Sample Time: 8.00 AM

Sampled By: STEVE WALTERS

Sampled by (CO): HILCORP

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1042	0.1054	0.0110	0.00	0.0010
CO2	2.5921	2.6225	0.4430	0.00	0.0394
Methane	94.6208	95.7311	16.0720	955.67	0.5241
Ethane	2.2843	2.3111	0.6120	40.43	0.0237
Propane	0.2859	0.2893	0.0790	7.19	0.0044
Iso-Butane	0.0496	0.0502	0.0160	1.61	0.0010
N-Butane	0.0280	0.0283	0.0090	0.91	0.0006
I-Pentane	0.0108	0.0109	0.0040	0.43	0.0003
N-Pentane	0.0038	0.0038	0.0010	0.15	0.0001
Hexane Plus	0.0205	0.0207	0.0090	1.08	0.0007
Total	100.0000	101.1733	17.2560	1007.48	0.5952

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
BTU/CU.FT IDEAL: 1009.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1012.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 994.4
DRY BTU @ 15.025: 1032.3
REAL SPECIFIC GRAVITY: 0.5962

CYLINDER #: 4118
CYLINDER PRESSURE: 51 PSIG
ANALYSIS DATE: 08/25/2023
ANALYSIS TIME: 11:31:36 AM
ANALYSIS RUN BY: SARAH BALLARD

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: 09/01/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: TIFFANY 3M 2; CSG
Stn. No.: 506706749
Mtr. No.: 0130101

CASING

09/01/2023
35825-12205

Smpl Date:	08/22/2023	06/02/2022	09/15/2021	08/18/2021	09/16/2020	06/05/2020
Test Date:	08/25/2023	06/09/2022	09/21/2021	08/27/2021	09/21/2020	06/09/2020
Run No:	HS20230246	HS20220103	HS2021245	HS2021205	HS200288	HS200040
Nitrogen:	0.1042	0.0640	0.0570	86.2884	0.0585	0.0688
CO2:	2.5921	2.5577	2.5456	0.1931	2.6083	2.5246
Methane:	94.6208	94.6881	94.6616	12.7796	94.6887	94.7578
Ethane:	2.2843	2.2996	2.3285	0.4725	2.2548	2.2622
Propane:	0.2859	0.2943	0.2962	0.1018	0.2910	0.2855
I-Butane:	0.0496	0.0462	0.0488	0.0223	0.0468	0.0466
N-Butane:	0.0280	0.0254	0.0264	0.0231	0.0254	0.0257
I-Pentane:	0.0108	0.0119	0.0113	0.0140	0.0114	0.0113
N-Pentane:	0.0038	0.0034	0.0037	0.0109	0.0043	0.0037
Hexane+:	0.0205	0.0094	0.0209	0.0943	0.0108	0.0138
BTU:	1012.0	1012.4	1013.5	147.9	1011.7	1012.5
GPM:	17.2560	17.2570	17.2640	11.9150	17.2540	17.2550
SPG:	0.5962	0.5955	0.5959	0.9195	0.5958	0.5951

Well Name: TIFFANY 3-M #2

API / UWI 0506706749	Surface Legal Location T33N-R07W-S35	Field Name Ignacio Blanco	Route 0510	State/Province Colorado	Well Configuration Type Vertical
Ground Elevation (ft) 6,388.00	Original KB/RT Elevation (ft) 6,398.00	RKB to GL (ft) 10.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Original Hole [Vertical]

