

## **ATTACHMENT B**



# Borehole Logging Form

**BOREHOLE ID:** SB01      **SITE NAME:** Howard 14-18 well      **CLIENT NAME:** PDC ENERGY  
**Date Completed:** 10/10/23      **Location:** Source  
**Drilling Company:** Tasman      **Surface Completion:**      **DTW:** —      **TD:** 10'  
**Type of Drill:** Hand Auger      **Geologist:** RY      **Project Manager:** B. Nelson  
**Bit Size:** 2 3/8"      **Logging Method:**

**Well Const. Material:** NA      **Screen:** NA      **Riser:** NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1	↑ NA ↓	↑ HA ↓	↑ 100% ↓	0.2		SW	0'-6' Brown, sand, fine to medium grain, well sorted, dry, no odor.
2				0.1			
3				0.0			
4				0.7			
5				0.3			
6				0.1			
7				0.8		6'-10' As above, moist.	
8				0.9			
9				0.7		SB0165/1000 SB0169/1002	
10				0.8		SB0167/1004	
11							- Groundwater not encountered
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Moderately sorted



# Borehole Logging Form

BOREHOLE ID: SB02      SITE NAME: Howard 14-18 WH      CLIENT NAME: PDC ENERGY

Date Completed: 10/10/23      Location: N of Source

Drilling Company: Tasman      Surface Completion: NA      DTW: NA      TD: 7'

Type of Drill: Hand Auger      Geologist: CL      Project Manager: B. Nelson

Bit Size : 2 3/8"      Logging Method:

Well Const. Material: NA      Screen: NA      Riser: NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description	
1	NA			1.1		SP	0-1' = Brown, Sand, fine grain, moderately cl. Sorted, Moist, No Odor	
2				1.1	SB02E2.5'1352	SW	1-7' = Light Brown, Sand, fine to medium grain, Moderately Sorted, Moist, No Odor	
3				0.7	SB02E2.5'1352			
4		HA	100	0.5				
5					0.7	SB02E5'E1354		
6					1.1	SB02E6'E1356		
7					1.4	SB02E7'1358		
8							Groundwater Not Encountered	
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Well Sorted



# Borehole Logging Form

**BOREHOLE ID:** S803      **SITE NAME:** Howard 14-18 WH      **CLIENT NAME:** PDC ENERGY  
**Date Completed:** 10/10/23      **Location:** West of source  
**Drilling Company:** Tasman      **Surface Completion:**      **DTW:** —      **TD:** 7'  
**Type of Drill:** Hand Auger      **Geologist:** RY      **Project Manager:** B. Nelson  
**Bit Size:** 2 3/8"      **Logging Method:**

**Well Const. Material:** NA      **Screen:** NA      **Riser:** NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description	
1	↑ NA ↓	↑	↑	0.4		SW	0'-4' Brown, sand, fine to medium grain, well sorted, dry, no odor. <sup>at</sup> moderately	
2		↑	↑	0.2				
3		↑	↑	0.3	S803051200			
4		HA	HA	100%	0.1			
5		↓	↓	↓	0.3	S803051202		4'-7' As above, moderately sorted.
6		↓	↓	↓	0.4	S803061204		
7		↓	↓	↓	0.2	S803071206		
8							- Groundwater not encountered	
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# Borehole Logging Form

**BOREHOLE ID:** S804      **SITE NAME:** Howard 14-18 WH      **CLIENT NAME:** PDC ENERGY  
**Date Completed:** 10/10/23      **Location:** S of source  
**Drilling Company:** Tasman      **Surface Completion:** NA      **DTW:** —      **TD:** 10'  
**Type of Drill:** Hand Auger      **Geologist:** EB      **Project Manager:** B. Nelson  
**Bit Size:** 2 3/8"      **Logging Method:**

**Well Const. Material:** NA      **Screen:** NA      **Riser:** NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description	
1	NA	↑	↑	0.4		SC	0-5' clayey sand, fine med grained, moderately sorted, dry, no odor/staining, brown	
2				0.3				
3				1.4	S804(2) 5' 1100			
4				0.3				
5				0.6	S804(5) 5' 1102			
6				0.7	S804(6) 6' 1105	SW		5-9' sand, fine-coarse grained w/ trace gravel, poorly sorted, brown moist, no odor/staining
7				0.9				
8				0.7	S804(8) 8' 1110			
9				0.7	S804(9) 9' 1112			
10				0.6	S804(10) 10' 1114			9-10' same above but dark brown
11						* groundwater not encountered		
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# Borehole Logging Form

BOREHOLE ID: SB05<sup>2</sup> SB05 SITE NAME: Howard 14-18 WH CLIENT NAME: PDC ENERGY  
 Date Completed: 10/10/23 Location: N of source  
 Drilling Company: Tasman Surface Completion: NA DTW: NA TD: 5'  
 Type of Drill: Hand Auger Geologist: EB Project Manager: B. Nelson  
 Bit Size: 2 3/8" Logging Method:

Well Const. Material: NA Screen: NA Riser: NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1	↑ NA ↓	↑	↑	1.0		SC LT	0-2' clayey sand, brown, fine to med grain, moderately sorted, dry, no odor/staining
2				0.4		Q-4	
3		HA	100%	1.1	SB05(2.5' m)	SW LT	2-5' sand, brown, fine to coarse grain w/ trace gravel, poorly sorted, dry, no odor/staining
4				0.3		Q-5	
5				0.8	SB05(5' 1032)	Q-8	
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# Borehole Logging Form

**BOREHOLE ID:** BK602     **SITE NAME:** Howard 14-18 WH     **CLIENT NAME:** PDC ENERGY  
**Date Completed:** 10/10/23     **Location:** Northwest background  
**Drilling Company:** Tasman     **Surface Completion:**     **DTW:** —     **TD:** 10'  
**Type of Drill:** Hand Auger     **Geologist:** RT     **Project Manager:** B. Nelson  
**Bit Size:** 2 3/8"     **Logging Method:**

**Well Const. Material:** NA     **Screen:** NA     **Riser:** NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1	NA	HA	100%	0.3		SP	0-5' Brown, sand, fine grain, well sorted, dry, no odor.
2				0.1			
3				0.3	BK602@25115		
4				0.4			
5				0.3	BK602@5'1117		
6				0.7	BK602@6'1119	SW	5-10' Brown, sand, fine to medium grain, moderately sorted, dry, no odor.
7				0.4			
8				0.5	BK602@8'1121		
9				0.6	BK602@9'1123		
10				0.5	BK602@10'1125		
11							- Groundwater not encountered
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# Borehole Logging Form

**BOREHOLE ID:** BK603      **SITE NAME:**      **CLIENT NAME:** PDC ENERGY  
**Date Completed:** 10/10/23      **Location:** N Background  
**Drilling Company:** Tasman      **Surface Completion:** NA      **DTW:** NA      **TD:** 10'  
**Type of Drill:** Hand Auger      **Geologist:** EB      **Project Manager:** B. Nelson  
**Bit Size:** 2 3/8"      **Logging Method:**

**Well Const. Material:** NA      **Screen:** NA      **Riser:** NA

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description		
1	NA	↑	↑	0.6		SW	0-1' clayey sand, dark brown, fine to coarse grain, moderately sorted, dry, no HC odor/stain		
2				0.3		SW	1-10' sand, light orange-brown, fine to coarse grained, moderately sorted, moist, no HC odor/staining, trace gravel		
3				0.4	BK603E5' 1041				
4				0.8					
5				HA	100.0	0.3	BK603E5' 1092		
6						0.3	BK603E6' 1093		
7						0.4			
8						0.5	BK603E8' 1044		
9						0.6	BK603E9' 1095		
10						0.6	BK603E10' 1046		
11							*groundwater not encountered		
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# Borehole Logging Form

BOREHOLE ID: **BK604**      SITE NAME: **Howard 14-18 WH**      CLIENT NAME: **PDC ENERGY**

Date Completed: **10/10/23**      Location: **Northeast background**

Drilling Company: **Tasman**      Surface Completion:      DTW: **—**      TD: **10'**

Type of Drill: **Hand Auger**      Geologist: **RY**      Project Manager: **B. Nelson**

Bit Size : **2 3/8"**      Logging Method:

Well Const. Material: **NA**      Screen: **NA**      Riser: **NA**

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1	NA	↑	↑	0.1		SW	0'-10' Brown, sand, fine to medium grain, moderately sorted, dry, no odor.
2				0.1			
3				0.2	BK60402S1300		
4				0.2			
5		HA	100%	0.1	BK60405S1302		
6				0.1	BK60406S1304		
7				0.2			
8				0.3	BK60408S1306		
9				0.3	BK60409S1308		
10				0.3	BK60410S1310		
11							- Groundwater not encountered
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## Borehole Logging Form

BOREHOLE ID: <b>BKG05</b>	SITE NAME: <b>Howard 14-18 LH</b>	CLIENT NAME: <b>PDC ENERGY</b>
Date Completed: <b>10/10/23</b>	Location: <b>Far East of Source</b>	
Drilling Company: <b>Tasman</b>	Surface Completion:	DTW: <b>NA</b> TD: <b>10'</b>
Type of Drill: <b>Hand Auger</b>	Geologist: <b>CL</b>	Project Manager: <b>B. Nelson</b>
Bit Size : <b>2 3/8"</b>	Logging Method: <b>HA</b>	

Well Const. Material: **NA**      Screen: **NA**      Riser: **NA**

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description	
1	NA	HA	100	0.7		SC	0-2' = Brown, Clayey Sand, Fine Grain, Well Sorted, Moist, No Odor	
2				0.5	<del>CL</del>			
3				0.4	<del>BKG05E25</del> 1411	SW	2-5' = Light Brown, Sand, Fine to Medium Grain, Moderately Sorted, Dry, No Odor	
4				0.4				
5				0.7	BKG05E5'1413			
6				0.7	BKG05E6'1415	SW	5-10' = Light Tan, Sand, Fine to Medium Grain, Moderately Sorted, Moist, No Odor	
7				1.0				
8				1.1	BKG05E8'1417			
9				1.0	BKG05E9'1419			
10				0.9	BKG05E10'1421			
11						Groundwater Not Encountered		
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