Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG				
	DATE	7	23	10
	NO.	—		
	SHEET	1	OF	2

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: ~~139703~~ 139703

FIELD ACTIVITY SUBJECT: Mud Rotary [redacted] MW-1 / Well Development Locker MW-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1 [redacted] stopped me on way to well. Gave me a sample of faucet water that contained 1/8" of grit that was recently discharged. Asked me to give it to D. DiGulio. Also, informed me that EPA had told her that a trench in the field would be backfilled. Told BLY, they said that they would need change order.

0730 Held tailgate safety meeting / JSA

0740 BLY began addition of 3RD motor to Shaker for drilling. Shaw began calibration / organization

0800 Calibration / checking operation status of 2100P Turbidimeter
Gulex Standards 0-10 NTU = 5.27 NTU
0-100 NTU = 54.4 NTU
0-1000 NTU = 525

0835 Called J. Tyburski. Reported field status. Will return call this afternoon to check on water level status in Locker MW-1, report info about obtaining pump for development

1015 Began inserting drill rods for mud drilling in Randell MW-1

1105 Began drilling rock.

1120 Roll-off bin ordered delivered to site (Additional bin ~~then~~ will need). Came from Evanston.
- J. Prince leaves site for lunch. Will continue monitoring.

1130 Deb Harris, Wyoming DEQ arrives on-site. Just checking progress / status.

1140 FID = 0.0 ppm ~~325~~ (310')

1155 PID = 0.0 LEL = 0% FID = 0.0 ppm (323')

1205 FID = 0.0 ppm (325'), PID = 0.0 ppm (325')

1220 FID = 0.0 ppm (330')

1235 FID = 0.0 ppm (340'), PID = 0.0 ppm (340')

1240 J Prince (Shaw) arrives back at site. Tim Longford (EPA) arrives also.

VISITORS ON SITE:
BLY - Cody Seal, Riley Oslin, Adam Ensign, Russ Otto
EPA - Tim Longford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
—

WEATHER CONDITIONS:
Sunny, clear, cool (60°), ~~calm~~ windy - a.m.
sunny, clear, hot (90°), windy - p.m.

IMPORTANT TELEPHONE CALLS:
Joe Tyburski - Shaw technology - field status

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Prince

SIGNATURE: David Kessler

DATE: 7/23/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	7	24	10
NO.			
SHEET	1	OF	2

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: [redacted] ~~MW-1 Development~~ DKK / [redacted] MW-1 Mud Drilling

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1.

0730 Held tailgate safety / JSA.

- Discussed next options for development. Will bail well dry this morning. Return Monday morning measure recharge after 48 Hrs. 1) Begin using pump? 2) inject tap water, bail? 3) inject Aqua-Clear?

0745 Began cal of YSI

0800 Began cal of Turbidity meter

Gelex standard: 0-10 NTU = 5.19 NTU

0-100 NTU = 54.2 "

0-1000 NTU = 525 " ok

- Began tripping in drill rods.

0900 Called Joe Tyburski. Checked to see if he had reviewed specs for pump if pump is desired to be used at Locker MW-1 for development. Had not had chance, yet will look at today, talk w/ EPA. Send email to me today or tomorrow.

- Reported to him that Locker is conducting flood irrigation, at least 2 ft water around Locker MW-1. Will flood irrigate for ~1 wk. May have to postpone development activities until irrigation complete.

0905 Began drilling w/ mud from 445 ft.

1030 Spoke w/ R. Otto (BLY). He had spoke w/ office. His supervisor recommended another injection of AQUA-CLEAR to loosen/break away mud possibly on formation walls.

- BLY ~~con~~ graded berm-levee to detour irrigation water from flowing by well (Locker MW-1). Will let sit to ~1200 and let water migrate away. Enough water present to float pallets used to stand on. Have not taken static water level reading today or performed any bailing.

- Will bail today, if possible. Speak to Shaw/EPA about adding AQUA-CLER.

1310 EPA (Tim Langford) detects spike of methane of 139 ppm at 535 ft. Just entering white sand layer.

1530 BLY - J. Prince left to Locker MW-1 to obtain water level measurement

VISITORS ON SITE:
Boart Longyear - Cody Seal, Russ Otto, Adam Ensign
Riley Osther
EPA - Tim Langford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
Did not develope Locker MW-1 today. Flooding irrigation being conducted.

WEATHER CONDITIONS:
Sunny, clear, warm (60°), calm - a.m.
Sunny, clear, hot (90°), breezy - p.m.

IMPORTANT TELEPHONE CALLS:
Joe Tyburski - Shaw

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Prince

SIGNATURE: David Kessler

DATE: 7/24/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG			
DATE	7	24	10
NO.	—	—	—
SHEET 2 OF 2			

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: [redacted] (b)(6) privacy [Landowner name] MW-1 Drilling (445-595')

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

1545 Began to clean out borehole.

1600 BLY/J. Prince returns to site. Water level same depth as yesterday, 928 ft.

1805 All drill pipe and bit out of borehole. J. Prince leaves site.

- BLY examined drill teeth. Still in good shape.

1820 Lowered drill bit (15') and one 30' drill rod into borehole. Blew-clean. Closed BOP.

- BLY reports that will have to trip out of hole at the end of each day. Mud zones believed to have swelled and caused problems removing bit. (Bit caught at ~415 ft). Could possibly extend drilling time period.
- Informed C. Seal that COB Monday (7/26) another time estimate will have to be made that geophysics crew will be needed at site. Currently scheduled for Thursday 7/29.

1900 Left site

David Keck 7/24/10

032B-12-98

EPAPAV0025261

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	7	26	10
NO.			
SHEET	1 OF 1		

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Mud Drilling [redacted] MW-1 (595' to 745')/Development [redacted] MW-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0650 Met driver from Wyoming Waste on way to site. Said that he attempted to get to empty roll-off bins at Lockers but because of irrigation flooding, way too wet, nearly stuck. Said that if Board to move bins to dryer area (near outhouse) he would be able to pick-up bins.

0705 Arrived [redacted] MW-1.

0745 Held tailgate safety meeting/JSA

0815 Began tripping rods back into borehole. Called J. Tyburski. Reported field status. Will call him back again later and report

0915 Calibrated YSI.

- 2100P Turbidity meter: Galex standards.

0-10 NTU = 5.58 NTU

0-100 NTU = 516.6 NTU

0-1000 NTU = 523 NTU

0930 J. Prince (Shaw), Adam Ensign (BLY) left to measure depth to water in [redacted] MW-1.

1045 Received call from J. Prince (T. Landford - EPA Ind). DTW in [redacted] MW-1 = 874 Ft. (106 Ft water column).

1110 Began drilling from 595 Ft. Weight of mud 9.8 lbs/gal

1215 Called J. Tyburski - Reported DTW

1225 Called Wyoming waste - Reported that [redacted] field drying drastically. Able to get truck to bins.

1340 Advanced thru CLAYSTONE zone ~655 Ft. FID = 56.5 ppm spike, PID = 15.6 ppm SPIKE. Mud stopped discharging. Material apparently fell on top of drill, Cannot lower bit and difficult to raise, will not turn. Began to slowly remove rods.

1440 Problem removed. 90 Ft piping raised, circulation obtained. Began cleaning borehole.

1500 Re measured MUD 9.8 lb/gal, pH = 8, solids = 2.5%

1910 Drill rods removed.

1930 Left site

VISITORS ON SITE:
BLY County Sed, Russ Otto, Adam Ensign, Polk Oskin
EPA Tim Langford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:
Sunny, clear, warm (60°), calm - a.m.
sunny, clear, hot (95°), breezy - p.m

IMPORTANT TELEPHONE CALLS:
Joe Tyburski .0815
Wyoming Waste - Michelle Forte.

SHAW E&I PERSONNEL ON SITE: David Keith, Jenny Price

SIGNATURE: David Keith

DATE: 7/26/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	7	27	10
NO.	—		
SHEET	1 OF 2		

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Mud Drilling [redacted] MW-1 (745-895) / Development of [redacted] MW-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived on-site. Began paperwork/prep.
0730 Held tailgate safety meeting/JSA
- Will plan on Colog conducting geophysics Thursday noon.
0800 Called Colog. Confirmed Thursday noon w/ them. Informed G. Bauer that unless I call them tomorrow to adjust time, Thursday noon is a go.
0810 Boart began tripping rods into borehole.
- Shaw calibrated YSI + Turbidity meter.
2100P Turbidimeter Gelex Standards:
0-10 NTU = 5.42 NTU
0-100 NTU = 54.3 NTU
0-1000 NTU = 524 NTU
All values w/ 5% of Gelex Standard ok
0920 Began mud drilling from 745'
1000 J. Prince left to pick-up FID from hotel/make copies. Back ~ 1200.
- Rod depth at 800 ft. Waiting 2-3 min. past marked rod depth to collect sample/cuttings from discharge for sample of 800 ft.
1315 Call Joe Tyburski. Informed him that Boart has ordered pump but that expected time to receive will be 3-5 day.
1335 BLY (A. Ensign) + J. Prince (Shaw) left to develope Locker MW-1. Informed BLY and J. Prince to ease into water bearing interval and ease out. Will prevent possible damage to well and reduce influx of formation into well. (Mud weight ~ 9.8 lb/gal)
1620 Shaw (J. Prince) returns to Randall's. Received high reading on FID 1,300 ppm and alarm set-off on PID. Stopped all activity.
- T. Langford (EPA) left to check vapors at well w/ Landfill gas meter.
1650 T. Langford returns. FID readings of ~1000 ppm, 3000 ppm, 4000 ppm. Methane is definitely present. Signs that last development may have opened up screen.

VISITORS ON SITE:
Boart Longyear - Russ Otto, Adam Ensign, Cody Seal, Riley Ostler
EPA - Tim Langford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
* Conducted no further development on Locker MW-1 due to high FID readings. LEL > 10% (50,000 ppm)

WEATHER CONDITIONS:
partly sunny, warm (60°), calm - a.m.
mostly sunny, hot (90°), breezy - p.m.

IMPORTANT TELEPHONE CALLS:
Colog G. Bauer - 308-888-1430 (Colog)
Joe Tyburski - (Shaw)

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Price

SIGNATURE: David Kessler

DATE: 7/27/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG				
	DATE	4	~~27~~ 27	10
	NO.		DCK	
	SHEET 2 OF 2			

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: ~~1399~~ 139703 DKK

FIELD ACTIVITY SUBJECT: Mud Drillin[redacted] MW-1 /

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

1730 BLY left area to [redacted] MW-1. Will tower down rig, move off well in case of forecasted rain-associated lightning.

1800 Drilled to 895 Ft. Began cleaning out borehole.

1840 Began to remove drill rods. Jenny Prince (Shaw) leaves site.
Tim Langford (EPA) left site ~1800

1915 Removed 300 Ft.

1940 Left Site.

Called Joe Tyburski.
1) OK to send Dom DiGuilio bondogs
2) Request 3 day TAT on soil cuttings.

David Kresh 7/27/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	7	28	10
NO.			
SHEET	1 OF 2		

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Mud Drilling [redacted] MW-1 (895-985')

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1. T. Lankford calibrating meter / rechecking vapors at well. No (minimal) hits in breathing air, highest ~5,000 ppm in 2" vent pipe.

0715 Arrived [redacted] MW-1.

0750 Held tailgate safety meeting / JSA.

0800 Opened BOP (Open / closed every evening).

0815 Began tripping rods / clean borehole on way down.

0935 Began drilling w/ mud from 895 ft. Drilling mud weight this morning 10.1 lbs/gal

1045 Called Colog. Confirmed time needed tomorrow (noon) and gave address of [redacted] MW-1.

1230 Called J. Scougard (Anchor). Informed him to have whomever get bins to [redacted]

- Results from meeting this morning b/w: EPA, Bonnt, Shaw: (informed to me by J. Prince)
  1) No more activity at well, close valve
  2) EPA ordering intrinsicly safe pump
  3) Will place gauge on well

1430 Encountered white sand. Informed EPA rep. T. Lankford of conclusions of meeting. When informed that well valve needed to be closed, he questioned.

- T. Lankford called EPA. D. Diguilio ~~said~~ nothing was mentioned during meeting about closing Locker MW-1 vent. If Shaw made decision to close then close, but would be best if able to leave open.
- Will contact J. Tyburski to see he wants valve closed and why. (The longer it is left open the more recharge will occur and the less venting will happen).

1530 Called C. Chance Rain-for-Rent. Inquired about lead time ~~requ~~ necessary for 2nd frac tank. Left message on cell.

1705 Mud tub malfunction, drilling depth 985 ft. (only 6 ft sand, back into shale).

- BLY began partial drill rod removal, disassemble mud tub to find problem. Informed by BLY that geophysics not off yet.

VISITORS ON SITE:
BLY - Russ Otto, Cody Seal, Adam Ensign, Riley Ostlie
EPA - Tim Lankford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
Postponed Colog 24 hrs for borehole geophysics.

WEATHER CONDITIONS:
cloudy, warm (65°), rain last night, calm a.m.
partly cloudy / cloudy, hot (80°), slight breeze - pm

IMPORTANT TELEPHONE CALLS:
Colog (Greg Bonnt) Confirmed time needed tomorrow
Chad Chance - Rain-for-Rent

SHAW E&I PERSONNEL ON SITE: D. Kessler, Jenny Prince

SIGNATURE: David Kessler

DATE: 7/28/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG			
DATE	7	28	10
NO.			
SHEET	2 OF 2		

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Mud Drilling [redacted] w-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

1900 Problem w/ mud tub: piston traveling ~~around~~ arm DER broke 3 threads inside piston.
Russ Otto needs to find tie+tap to re thread. Will have to be done tomorrow.
- Called Colog. Postponed geophysics until Friday noon. Will call them Thursday 7/29 to confirm or postpone.

1920 J. Prince leaves site. Had air monitoring logs but not all complete. Will complete tomorrow and send (pdf) on ~~Fri~~ Thursday evening.
- Discuss repair plans: Options
  1) Call TD at 985' Mud tub still able to clean borehole for geophysics. Give full day cleaning
  2) Find Tap+Tie; repair mud tub, drill last 15 ft. Still questionable if able to be fixed by tap/die
  3) ~~Rent~~ Find + rent pump. Drill time could be ~~to~~ mid-afternoon.
- Will call Joe Tyburski tomorrow morning 700, meet at site 0800.

2000 Left site.

David Kersh 7/28/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG	DATE	7	29	10
	NO.	—		
	SHEET	1	OF	2

PROJECT NAME: EPA Pavillion Drilling | PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: End of Drilling (b)(6) privacy [Landowner n [redacted] MW-1, Cleaning Borehole

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0730 Called Joe Tybuski to inquire about emails and work for today.
- He would review emails, make calls, and return call back.

0810 Arrived (b)(6) privacy [Landowner name [redacted] MW-1.
- Boart and EPA arrive on-site.

0900 Called Joe Tybuski to discuss status.
- Attempted conference call w/EPA. D. DiGuilio. Left message on cellphone recommending ending drilling on (b)(6) privacy [Landowner [redacted] MW-1, flushing borehole
- T. Lankford (EPA) calls D. DiGuilio. Explains status. Agrees on borehole ~~completion~~ completion.
- Inform Boart that drilling finished. Prep to clean borehole.
- Called G. Bauer. Informed to drive to Riverton tonight, geophics can begin ~1000 Fri 7/30

1005 Held tailgate safety meeting/JSA. Discussed plans.

1030 Turned on mud tub, mud flowing. Began flushing process.
- Called J. Tybuski. ~~Infor~~ Asked about collection of QA, IDW samples. Will investigate and return call.

1135 Cody Seal left site back to Riverton to obtain phone. Borehole flushing, bit left on/near bottom. BLY: A. Ensign and R. Osthus monitoring.
- D. Kessler (Shaw) began compositing ~~sa~~ cutting samples for Randall Box 1, Box 2, and Box 3. During sample collection at 10 ft intervals (and from initial post hole), a portion of sample was placed in a zip-lock bag pertaining to the roll-off box cuttings discharged into. Therefore 3 bags are present for each of the 3 roll-off bins. Samples were transferred into 3 to 4 individual gallon-size ziplocks (per sample [roll-off bin]) and composited, based on large quantity of cuttings to obtain better composite sample.

1400 Received call from J. Tybuski. Collect no QA/QC samples from IDW. Worksheet #20 identifying QA/QC was put together based on possible Landfill requirements and possible high/higher analytical detections. Also, collect mud sample.

VISITORS ON SITE:
BLY - Cody Seal, Russ Otto, Adam Ensign, Riley Osthus
EPA - Tim Lankford

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
Ended drilling of Randall MW-1 borehole at 985 ft with consensus of EPA.

WEATHER CONDITIONS:
partly cloudy, warm (60°), calm, rain last night - a.m.
partly cloudy, hot (80°), breezy, rain clouds in view - p.m.

IMPORTANT TELEPHONE CALLS:
Colby - G. Bauer. 0800
Joe Tybuski - Shaw 0900

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Prina

SIGNATURE: David Kessler | DATE: 7/29/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG			
DATE	7	29	10
NO.	—		
SHEET	2 OF 2		

PROJECT NAME: EPA Pavillion Drilling | PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Flushing [redacted] MW-1 / prep for Colog borehole geophysics

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

1400 BLY tripping drill rods from borehole, flushing as coming up.

1520 Collected [redacted] Box #1. See composite work done at 1135. Packed soil w/ new nitrile glove into appropriate container. Analyzed for 2@8oz amber - 8260B TCLP, 8270C TCLP reg list, 6010B - TCLP RCRA Metals, 1@4oz amber jar - 9095A - Paint Filter

1530 Collected [redacted] Box #2. Same analytes and bottles as Randall Box #1

1540 Collected [redacted] Box #3:

1620 Drill bit brought to surface. No clog, teeth still in good shape (reported by driller C. Seal).

1650 Began tripping back into borehole. Will advance to bottom

1730 Collected [redacted] MWD - Collected sample by holding container under discharge pipe and filling appropriate sample bottle. Sampled for: 2@1L amber - 8270C ~~[illegible]~~, HSL, CLP Full, ~~3@40 ml vow - 8260B HSL CLP Full~~, 1@500 ml poly 6010B / 7470A mercury. unable to collect, half bubbles - could not disaperse bubbles.

Also collected: 2@8oz wide mouth amber jars - 8270C, 8260B, 6010B, 7470A, 9095A not sure if samples needed. Included note on COC to contact Kevin Jackson to discuss.

1830 Left site to Fed-x and get fresh ice. J. Prince supervisor BLY add rods.

1900 Arrived Fed-x. Fed-x closed. Closed at 1730. Will send samples tomorrow for receipt Saturday.

1930 Arrived hotel, packed samples in ice. End of day.

David Kessler 7/29/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG	DATE	7	30	10
	NO.	—		
	SHEET	1	OF	1

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Borehole Cleaning / Geophysical Logging [redacted] MW-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1. (Stopped by [redacted] MW-1. Inspection access to mud bins. Area dry. No water, dry soil).

0800 Held initial safety meeting / JSA.

0825 BLY started rig / circulation.

0830 Called Colog - In Riverton, all ok - will be at site at 9:45.

Anchor Environmental - Jim Scougland. Mud bins still not present. Please schedule (left messages)

Wyoming Waste - could not talk to representation (Michelle Foote)

Kevin Jackson (Shaw) - Informed him to contact Lori Parsons of TA and guide her through which sample jars / which samples to analyze to prevent unnecessary work - money - time wasted. Kevin said he would.

Lori Parsons - Left message that she will receive samples Sat (7/31) morning and to expect call from K. Jackson with instructions for analysis.

1000 Began to trip out rods / bit.

1130 Colog arrives on-site.

- Held safety meeting w/ them. Discuss plans, needs. Informed of addresses, in writing, of where to send geophysical logs once complete.

1130 Rods out of borehole. Turned area over to Colog.

Will make 3 runs / trips in / out borehole to record: Caliper, Density, Electric Resistivity, + Natural Gamma

1205 Left site to Fed-X / package / ship samples

1345 Returned to Kendall MW-1

1400 J. Prince leaves for day. R. Otto, R. Ostler, Adam Ensign (BLY) gone also.

1515 Winch motor in Colog truck down. Attempting fabrication of screw cable to turn winch using drill.

1550 Began rewind of winch cable. Slow 15 ft / min

1900 Completed borehole logging. Began cleanup. 1930 Left site.

VISITORS ON SITE:
BLY - Cody Seal, Adam Ensign, Riley Ostler
Colog - Greg Bauer, Mark Machosky

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:
cloudy, warm (65°), calm - a.m.
mostly sunny, hot (90°), calm - p.m.

IMPORTANT TELEPHONE CALLS:
Colog - 0830
Anchor Environ. 0834

SHAW E&I PERSONNEL ON SITE: David Keach, Jenny Prince

SIGNATURE: David Keach

DATE: 7/30/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	7	31	10
NO.	—		
SHEET	1 OF	1	

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Conditioning/Borehole Prep, Cleanup, Decon [redacted] MW-1

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0900 Arrived [redacted] MW-1. Began paperwork.
- Held tailgate safety meeting/JSA
0925 Began rig warm-up/prep to trip in rods. Began review of geophysical logs for screen interval selection. Called Jon Tymski to discuss.
0935 Began inserting drill rods. Will advance to bottom, flushing on progression.
1135 Drill rods on bottom of borehole (987') flushing.
1200 BLY (A. Ensign + R. Ostler) left to Lockes MW-1 to obtain ~1000 ft BQ rods.
1220 J. Prince left site for day.
- BLY (Cody Seal) began decon of riser for well. Stacked riser on plastic and covered. Complete decon on pipes not performed (pressure washer, soap). Pipes new, caps on end. Road dust washed from pipes. No visual signs of O/G.
- 30 ft drill rods removed from borehole. Borehole mud clean (no cuttings).
- Loaded trash generated at [redacted] MW-1 since 7/17. Will take to Landfill.
1430 left site.

David Kessler 7/31/10

VISITORS ON SITE:
BLY- Cody Seal, Riley Ostler, Adam Ensign

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
—

WEATHER CONDITIONS:
partly sunny, warm (65°), calm - a.m. (occasional sprinkles)
partly cloudy, warm (85°), calm - p.m.

IMPORTANT TELEPHONE CALLS:
J. Tymbuski - Shaw

SHAW E&I PERSONNEL ON SITE: D. Kessler, Jenny Prince

SIGNATURE: David Kessler

DATE: 7/31/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	8	2	10
NO.	—	—	—
SHEET 1 OF 2			

PROJECT NAME: EPA Pavillion Drilling

PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Backfill of [redacted] MW-1 (830-987)

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1. Began prep for day. ~~Be~~ A conference call was held Sunday 8/1 between Shaw (D. Kessler, Joe Tyburski) and EPA (Dom DiGuilio) to determine where screen was to be located. Further review of the possible screen location by other EPA members was identified to be needed prior to final setting. A definite known location above or at a depth of 800 ft was decided. Therefore, Boart Longyear was contacted and informed to contact local cement companies that a volume of grout (cement) from 987 ft to 830 ft will be needed.

- Boart held internal H/S meeting.

0745 Called Wyoming Waste. Personnel will be in at 0800.

0815 Informed Boart that screen interval could possibly be placed from 780-800 ft then filter pack brought up to 760 ft. Boart said that sand (filter pack) not able to be added to mud borehole. If mud removed, then sand washed to desired depths, borehole will likely be lost.

- Boart calling office to check on time frame another 20 ft screen could be obtained, if necessary.

0845 Called Wyoming Waste. Spoke w/ M. Forte. Inquired about moving roll-off bins from Lockers to Randalls. Informed her that roll-off bins requested to be moved last week. ~~Was~~ Was not done. Nuers today.

0915 Called J. Tyburski. Informed him that will be unable to add additional sand pack. Time frame for obtaining a second screen would be 4-5 working days.

- Joe will put together email and send to EPA to inform (D. DiGuilio, S. Acree, ...)
- Also inquired about permission to crack ball valve on Locker MW-1. Joe said he will check w/ J. Hiatt (Shaw H/S)

0940 J. Prince informs me that J. Tyburski called. Received permission to crack ball valve on Locker MW-1. J. Prince says that she needs to obtain ~~new~~ DKL hydrogen ordered for calibration of FID before cracking valve. Will crack valve after lunch. (~5000 ppm)

1000 BLY began tripping out rods.

VISITORS ON SITE:
BLY - Cody Seal, Riley Osther, Adam Ensign, Russ Otto

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:
mostly sunny, cool (60°), calm - a.m.
mostly sunny, hot (90°), slight breeze - p.m.

IMPORTANT TELEPHONE CALLS:
Wyoming Waste - Michelle Forte
Joe Tyburski - Shaw

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Prince

SIGNATURE: David Kessler

DATE: 8/2/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG			
DATE	8	2	10
NO.	—		
SHEET 2 OF 2			

PROJECT NAME: EPA Pavillion Drilling | PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Backfill of [redacted] MW-1 to 830 ft BGS.

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

1100 J. Prince leaves site to obtain calibration gas
1200 Drill rods removed from borehole.
1220 Called J. Tylbarski. No news yet from EPA concerning screen interval.
- Called Wyoming Waste. She contacted drivers supervisor to find schedule and whereabouts of drying. Said that were one on list today but could not tell me time. Driver got late start/had problems.
1300 Began tripping in BQ (tremie rods)
1345 J. Prince (Shaw) & BLY (R. Otto) cracked valve on Locke MW-1. Meter readings were exceeded on LEL meter.
1430 Lime truck that will pump concrete/bentonite to tremie pipe arrives on-site
1450 Cement truck w/ ~3 yds, arrives on-site
1500 J. Prince leaves site to Locke MW-1 to measure vapors near Locke MW-1.
1515 15 ppm inside valve, also informs Mr. Locke of detection, stay away
1530 Began pumping exact quantity of cement, mud to bring to 830 ft.
1535 Called D. DiGuilio. Inquired if decision of screen location had been made. Dom said based on opinions of other geos, screen from 765-785'. Also suggested possibility of raising sand basket 20 ft. Informed him could be done, benefit - was not sure though. Scheduled conference call tomorrow morning 8:00 MST, 9:00 central.
- Need to also get a gauge > 100, 1000 lb gauge. Approval Brent
- Will hash out select best screen interval w/ Christian (Board), EPA, Shaw.
1630 Grouting completed. Up to 830 ft (based on volume inserted).
- Began clean-up
1800 Left site.

David Kessler 8/2/10

Shaw® Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG

DAILY LOG			
DATE	8	3	10
NO.	—		
SHEET	1 OF 2		

PROJECT NAME: EPA Pavillion Drilling | PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Addition of Cement to 790 ft, Recondition of borehole

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0700 Arrived [redacted] MW-1. Large, dark storm cloud in west, blowing NE.
0730 Rain begins, strong wind
0800 Called into conference w/ EPA (Dom DiGuilio, Randall, Stevens), Christian-Bodt, Russ Bratt.
- Conclusion is to set screen 765-785 ft.
- Will not raise sand basket because it would be extremely hard to develope well w/mud in hole
- Will inject/place hard bottom up to 785 ft
0900 Called J. Tyburski. Informed of results of call.
0930 Storm has passed, rain/lighting finished. A mature photographer on-site taking pictures of drill rig/mud system.
0945 Held tailgate safety meeting/JSA.
1000 BLY began flushing borehole. Large volume of very heavy solids discharged during flushing. Believe cement added to base of hole, heated the mud & solids, then flushed out of borehole.
1050 J. Prince (Shaw) & R. Otto (Bratt) return to site from Lockers MW-1.
- Vapor readings >16% LEL (>16000 ppm) no pressure measured in well from vent valve closed ~0700-1030.
1100 Called Wyoming Waste. (M. Forbe) One of 2 trucks down. Operating truck performing work at Landfill. Hopefully down truck will be in service this afternoon, therefore bins will be relocated hopefully, this afternoon.
- BLY ~~inserting 9 7/8" bit, rods~~ Dke removing tremie rods.
1140 Left site to airport to pick-up J. Wilson.
1300 Arrived back at Randall MW-1. BLY tripping in drill piping
- Received call from J. Tyburski. Informed him of Anchor Environmental bin relocation work. Joe said to deal w/ Anchor directly from now on.
- Called Anchor. Informed of wanting to have bins moved, attempted calls to ~~the~~ Wyoming Waste.
- Called Rain For-Rent. Quote given to me by Christopher Stevens (307)-789-3858 was $1,478 total. Total him hired. He will be at site tomorrow moring.

VISITORS ON SITE:
BLY - Russ Otto, Cody Seal, Adam Ensign, Riley Ostler

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:
cloudy, very windy, storm clouds, sprinkles - A.M. RAIN (0700-0930)
mostly sunny, calm, hot (90°) - p.m.

IMPORTANT TELEPHONE CALLS:
Dom DiGuilio - EPA 0800
Joe Tyburski - Shaw 0900
Wyoming Waste

SHAW E&I PERSONNEL ON SITE: David Kessler, Jenny Prince

SIGNATURE: David Kessler | DATE: 8/3/10

Shaw Environmental & Infrastructure, Inc.

FIELD ACTIVITY DAILY LOG CONTINUATION SHEET

DAILY LOG			
DATE	8	3	10
NO.			
SHEET 2 OF 2			

PROJECT NAME: EPA Pavillion Drilling | PROJECT NO.: 139703

FIELD ACTIVITY SUBJECT: Addition of Cement, Condition of Borehole

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

- In addition, will bring frac tank from Riverton, same on special trip. Frac tank will be needed sometime next week.

1530 Ear on carousel broke on rig. Began repair.

- ~~Had~~ Grout brought up to 831 Ft. Need to add additional cement up to 790 Ft.

1600 J. Price/Russ Otto/A. Ensign left to measure static in Locker MW-1.

- Boat removing drill rods/piping. Need to insert BQ rods (tremie) for addition of grout and then mix 40 Ft grout. Unlikely time will permit.

1700 J. Prince returns to site. DTW = 717 Ft Locker MW-1. (263 Ft water column)

1730 Drill pipe removed.

1745 Began to insert BQ (tremie pipe)

1830 BQ rods inserted. Encountered cement at 831 Ft.

- Began circulation to ensure rods clear.

1930 End of day.

8/3/10

David Kessel