Leking, Geoffrey R, EMNRD

From: Leking, Geoffrey R, EMNRD
Sent: Monday, August 10, 2009 9:11 AM
To: 'jimmyc@forl.com'
Subject: RE: Remediation of Denton Field Historic Spill Sites

Jimmy

This email serves as approval of the Fasken Oil and Ranch, Ltd, Proposed Cleanup of Historic Salt Water Spill Sites, Denton Salt Water Disposal System, Denton; Wolfcamp and Devonian Fields , Lea County, New Mexico risk based correction action plan dated July 31, 2009.

Geoffrey Leking
Environmental Engineer
NMOCD-Hobbs
419-393-6161 Ext. 113
419-399-2990

From: Jimmy Carlile [mailto:jimmyc@forl.com]
Sent: Thursday, August 06, 2009 7:14 AM
To: Leking, Geoffrey R, EMNRD
Subject: RE: Remediation of Denton Field Historic Spill Sites

Geoff, just wanted to make sure you had gotten the proposed work plan for the historic sites at the Denton SWD System. Let me know if you have any questions on it. Please email me an approval of the plan, or let me know if it is already scanned into the OCD Online System. We need the approval to send to prospective environmental contractors as part of the bid process.

From: Jimmy Carlile [mailto:jimmyc@forl.com]
Sent: Friday, July 31, 2009 11:36 AM
To: 'Leking, Geoffrey R, EMNRD'
Cc: 'Johnson, Larry, EMNRD'
Subject: Remediation of Denton Field Historic Spill Sites

Good morning Geoff,

I caught Larry Johnson on his cell a little earlier today and he said he was going to be out for at least a month with some shoulder surgery. I told him Fasken will be submitting a work plan to OCD for a risk based corrective action plan to remediate what appear to be 8 historic spill sites at the Denton SWD System. We will be utilizing the same procedure we have used on other RBCA plans in this field. Larry said he would give you a heads up call on this to let you know it was coming.

I plan on getting this plan out this afternoon, so you should have it Monday or Tuesday latest. Please give me a call if you have any questions about our plan. Looking forward to working with you on this.

Jimmy D. Carlile

Fasken Oil and Ranch, Ltd.
303 West Wall, Suite 1800
Midland, TX 79701

FASKEN OIL AND RANCH, LTD.

303 WEST WALL AVENUE, SUITE 1800
MIDLAND, TEXAS 79701-5116

(432) 687-1777
jimmyc@forl.com

Jimmy D. Carlile
Regulatory Affairs Coordinator

July 31, 2009

Mr. Geoffrey Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240

Dear Mr. Leking,

Re: Fasken Oil and Ranch, Ltd.
Proposed Cleanup of Historic Salt Water Spill Sites
Denton Salt Water Disposal System
Denton; Wolfcamp and Devonian Fields
Lea County, New Mexico

Fasken Oil and Ranch, Ltd. is operator of the Denton Salt Water Disposal System serving the Denton; Wolfcamp and Devonian Fields in Lea County. Fasken has identified 8 potential historic salt water spill sites that are in need of remediation. Each of these sites has been delineated both horizontally and vertically. Fasken proposes the following risk based correction action plan to begin to remediate these sites.

Fasken will bring in an environmental contractor to excavate heavily chloride contaminated soil from above the caliche layer. We have found the caliche layer to range from 3 feet to 5 feet in depth across this area. This material will be hauled off site to an NMOCD approved land fill that is permitted to accept chloride contaminated material. Field testing will be utilized to provide updated delineation information. Laboratory analysis will be used to support final excavation limits.

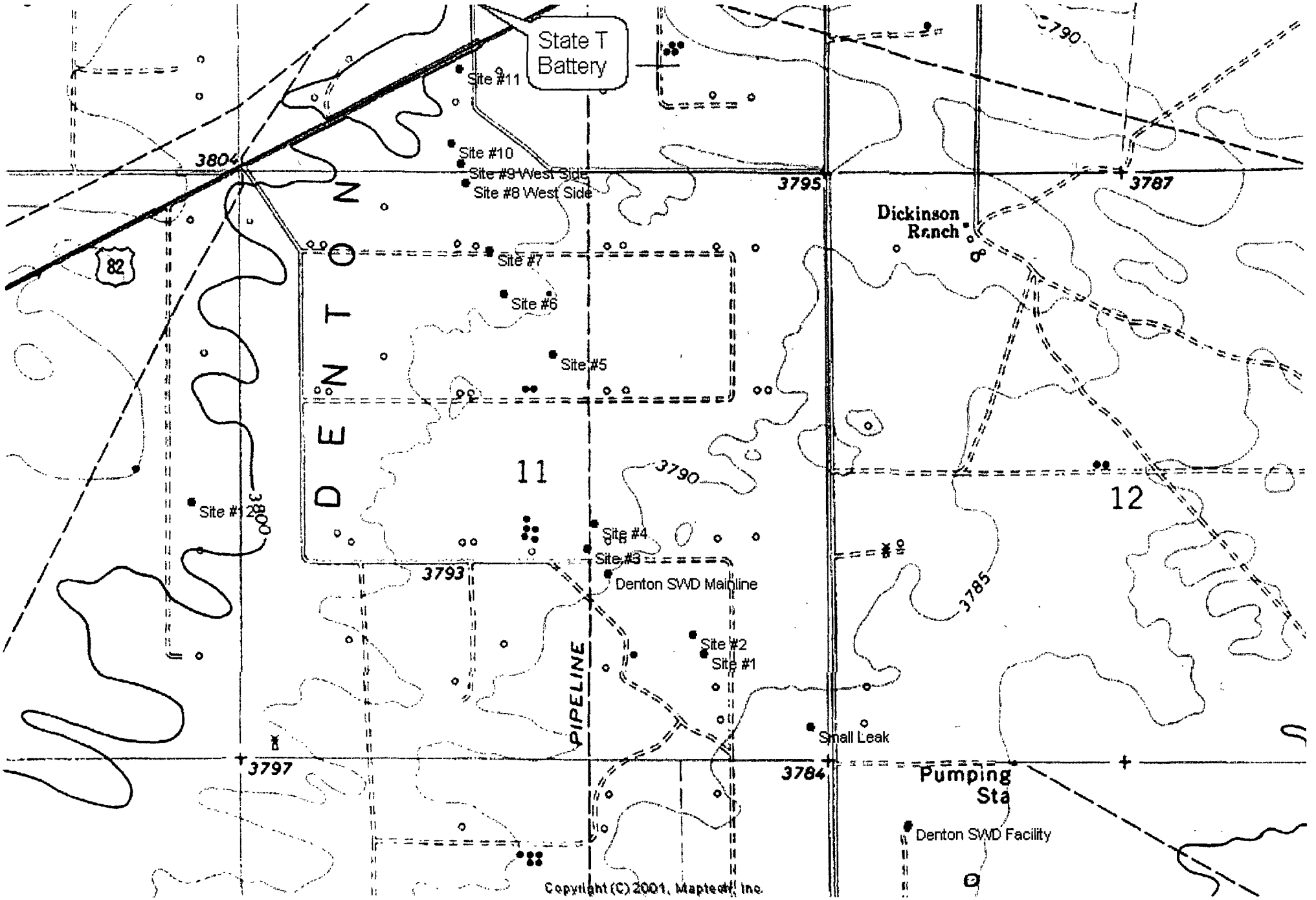
A 20 mil liner will be installed above the caliche layer once the contaminated material is removed. Before the liner is put into the excavation, we will contact and secure NMOCD approval to place the liner and begin backfilling. Clean material will be backhauled and stockpiled on location to complete the backfill process. Backfill material will be sampled for chloride contamination before it is put into the excavation. Rock free material will be used to cover the liner and topsoil similar in quality to what was excavated will be used for the top 3 feet of fill.

As additional information, I have attached a map showing the location of these potential historic salt water spill sites along with the results of the vertical delineation for each site. The delineation and sampling of these sites was supervised by Safety and Environmental Solutions, Inc. out of Hobbs.

If you have any questions concerning this proposed plan please contact me at (432) 687-1777 or email me at jimmyc@forl.com.

Yours truly,

Jimmy D. Carlile
Regulatory Affairs Coordinator


State T Battery
Site #11
Site #10
Site #9 West Side
Site #8 West Side
Site #7
Site #6
Site #5
Site #4
Site #3
Site #2
Site #1
Denton SWD Mainline
Small Leak
Denton SWD Facility
Dickinson Ranch
Pumping Sta
PIPELINE
DENTON
11
12
3804
3795
3787
3790
3800
3793
3785
3797
3784
82
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Ana-Lab Results:
Fas-09-001 Fasken Mainline Delineation

Site 2: Lab-Project # 440196

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	11.9	N/A	N/A	N/A	N/A	N/A
BH #1 5'	1060	ND	ND	ND	ND	ND
BH #1 10'	975	N/A	N/A	N/A	N/A	N/A
BH #1 15'	223	N/A	N/A	N/A	N/A	N/A
BH #1 20'	386	N/A	N/A	N/A	N/A	N/A
BH #1 25'	14.7	N/A	N/A	N/A	N/A	N/A
BH #1 30'	10.7	ND	ND	ND	ND	ND
BH #2 Surface	324	N/A	N/A	N/A	N/A	N/A
BH #2 5'	544	ND	ND	ND	ND	ND
BH #2 10'	1410	N/A	N/A	N/A	N/A	N/A
BH #2 15'	2150	N/A	N/A	N/A	N/A	N/A
BH #2 20'	2150	N/A	N/A	N/A	N/A	N/A
BH #2 25'	1220	N/A	N/A	N/A	N/A	N/A
BH #2 30'	650	N/A	N/A	N/A	N/A	N/A
BH #2 35'	308	N/A	N/A	N/A	N/A	N/A
BH #2 40'	218	ND	ND	ND	ND	ND
BH #3 Surface	762	N/A	N/A	N/A	N/A	N/A
BH #3 5'	1320	ND	ND	ND	ND	ND
BH #3 10'	1670	N/A	N/A	N/A	N/A	N/A
BH #3 15'	1910	N/A	N/A	N/A	N/A	N/A
BH #3 20'	161	N/A	N/A	N/A	N/A	N/A
BH #3 25'	77.7	N/A	N/A	N/A	N/A	N/A
BH #3 30'	21.2	ND	ND	ND	ND	ND

Site 3: Lab Project #440217

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	95.7	N/A	N/A	N/A	N/A	N/A
BH #1 5'	616	ND	ND	ND	ND	ND
BH #1 10'	1010	N/A	N/A	N/A	N/A	N/A
BH #1 15'	1290	N/A	N/A	N/A	N/A	N/A
BH #1 20'	1010	N/A	N/A	N/A	N/A	N/A
BH #1 25'	826	N/A	N/A	N/A	N/A	N/A
BH #1 30'	514	N/A	N/A	N/A	N/A	N/A
BH #1 35'	34.7	N/A	N/A	N/A	N/A	N/A
BH #1 40'	24.3	ND	ND	ND	ND	ND
BH #2 Surface	2260	ND	ND	ND	ND	ND
BH #2 5'	1110	N/A	N/A	N/A	N/A	N/A
BH #2 10'	1330	N/A	N/A	N/A	N/A	N/A
BH #2 15'	1430	N/A	N/A	N/A	N/A	N/A
BH #2 20'	590	N/A	N/A	N/A	N/A	N/A
BH #2 25'	349	N/A	N/A	N/A	N/A	N/A
BH #2 30'	540	ND	ND	ND	ND	ND
BH #2 35'	282	N/A	N/A	N/A	N/A	N/A
BH #2 40'	115	N/A	N/A	N/A	N/A	N/A
BH #2 45'	77.6	ND	ND	ND	ND	ND

Site 4:Lab Project #440219

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	17.8	N/A	N/A	N/A	N/A	N/A
BH #1 5'	N/A	N/A	N/A	N/A	N/A	N/A
BH #1 10'	646	ND	ND	ND	ND	ND
BH #1 15'	182	N/A	N/A	N/A	N/A	N/A
BH #1 20'	14.4	ND	ND	ND	ND	ND
BH #2 Surface	355	N/A	N/A	N/A	N/A	N/A
BH #2 5'	887	ND	ND	ND	ND	ND
BH #2 10'	1100	N/A	N/A	N/A	N/A	N/A
BH #2 15'	259	N/A	N/A	N/A	N/A	N/A
BH #2 20'	251	ND	ND	ND	ND	ND
BH #3' Surface	1660	N/A	N/A	N/A	N/A	N/A
BH #3 5'	N/A	N/A	N/A	N/A	N/A	N/A
BH #3 10'	968	ND	ND	ND	ND	ND
BH #3 15'	627	N/A	N/A	N/A	N/A	N/A
BH #3 20'	461	N/A	N/A	N/A	N/A	N/A
BH #3 25'	450	N/A	N/A	N/A	N/A	N/A
BH #3 30'	390	N/A	N/A	N/A	N/A	N/A
BH #3 35'	235	N/A	N/A	N/A	N/A	N/A
BH #3 40'	153	N/A	N/A	N/A	N/A	N/A
BH #3 45'	152	ND	ND	ND	ND	ND

Site 6: Lab Project #439520

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	1070	N/A	N/A	N/A	N/A	N/A
BH #1 5'	2480	ND	ND	ND	ND	ND
BH #1 10'	1010	N/A	N/A	N/A	N/A	N/A
BH #1 15'	905	N/A	N/A	N/A	N/A	N/A
BH #1 20'	9.08	N/A	N/A	N/A	N/A	N/A
BH #1 25'	<6.00	ND	ND	ND	ND	ND
BH #2 Surface	348	N/A	N/A	N/A	N/A	N/A
BH #2 5'	N/A	N/A	N/A	N/A	N/A	N/A
BH #2 10'	1110	ND	ND	ND	ND	ND
BH #2 15'	N/A	N/A	N/A	N/A	N/A	N/A
BH #2' 20'	148	N/A	N/A	N/A	N/A	N/A
BH #2 25'	143	ND	ND	ND	ND	ND
BH #3 Surface	2070	N/A	N/A	N/A	N/A	N/A
BH #3 5'	N/A	N/A	N/A	N/A	N/A	N/A
BH #3 10'	509	ND	ND	ND	ND	ND
BH #3 15'	153	N/A	N/A	N/A	N/A	N/A
BH #3 20'	9.69	N/A	N/A	N/A	N/A	N/A
BH #3 25'	11.1	ND	ND	ND	ND	ND

Site 7:Lab Project #439521

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	1650	N/A	N/A	N/A	N/A	N/A
BH #1 5'	4890	ND	ND	ND	ND	ND
BH #1 10'	861	N/A	N/A	N/A	N/A	N/A
BH #1 15'	1470	N/A	N/A	N/A	N/A	N/A
BH #1 20'	1070	N/A	N/A	N/A	N/A	N/A
BH #1 25'	430	N/A	N/A	N/A	N/A	N/A
BH #1 28'	93.4	ND	ND	ND	ND	ND

Site 10:Lab Project #439522

Sample Point	Chloride (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Xylenes (ug/kg)
BH #1 Surface	209	N/A	N/A	N/A	N/A	N/A
BH #1 5'	874	N/A	N/A	N/A	N/A	N/A
BH #1 10'	459	N/A	N/A	N/A	N/A	N/A
BH #1 15'	48.2	N/A	N/A	N/A	N/A	N/A
BH #1 20'	<6.00	ND	ND	ND	ND	ND
BH #2 Surface	273	N/A	N/A	N/A	N/A	N/A
BH #2 5'	563	ND	ND	ND	ND	ND
BH #2 10'	1410	N/A	N/A	N/A	N/A	N/A
BH #2 15'	1150	N/A	N/A	N/A	N/A	N/A
BH #2' 20'	1090	N/A	N/A	N/A	N/A	N/A
BH #2 25'	125	N/A	N/A	N/A	N/A	N/A
BH #2 27'	67.0	ND	ND	ND	ND	ND
BH #3 Surface	8.39	N/A	N/A	N/A	N/A	N/A
BH #3 5'	1090	ND	ND	ND	ND	ND
BH #3 10'	149	N/A	N/A	N/A	N/A	N/A
BH #3 15'	29.3	ND	ND	ND	ND	ND

Main Line Leak Southeast of Legacy battery
July 2004

Date	Sample ID	Cl^- (mg/Kg)
9/23/04	SS-1	23993
9/23/04	SS-2	33989
9/23/04	SS-3	31190
9/23/04	SS-4	27591
9/23/04	SS-5	14396
9/23/04	SS-6	21593
9/23/04	SS-7	26792
9/23/04	BH #1, 5'	2495
9/23/04	BH #1, 8-10'	2559
9/23/04	BH #1, 20'	1136
9/23/04	BH #1, 25'	2719
9/23/04	BH #1, 27'	1152
9/23/04	BH #2, 5'	6158
9/23/04	BH #2, 15'	3439
9/23/04	BH #2, 20'	2575

Date	Sample ID	Cl^- (mg/Kg)
9/23/04	BH #2, 25'	160
9/23/04	BH #2, 30'	320
9/23/04	BH #3, 5'	1600
9/23/04	BH #3, 10'	80
9/23/04	BH #3, 15'	48
9/23/04	BH #3, 20'	32
9/23/04	BH #3, 25'	48
9/24/04	BH #4, 5'	112
9/24/04	BH #4, 10'	48
9/24/04	BH #5, 5'	192
9/24/04	BH #5, 10'	96
9/24/04	BH #6, 5'	288
9/24/04	BH #6, 10'	80
9/24/04	BH #6, 15'	64

After samples were retrieved all boreholes were plugged back to surface with bentonite.

VI. Figures & Appendices

Figure 1 – Vicinity Map
Figure 2 – Site Plan
Appendix A – C-141
Appendix B – Analytical Results
Appendix C – Site Photos

Denton SWD Main Battery
Spill Area Southeast of Bty
March 2007

Fasken Denton SWD
Fas-07-001
Results From Boreholes

Sample ID	Field Chlorides (PPM)	Lab Chlorides	TPH: GRO	TPH: DRO	Total
BH 7 6"	236	1100			
BH 7 5'	644	1200			
BH 7 10'	1384	440			
BH 7 15'	2532	1900			
BH 7 20'	2008	1700			
BH 7 25'	1196	850			
BH 7 30'	1288	1300			
BH 7 35'	1288	1600			
BH 7 40'	956	910			
BH 7 45'	884	550			
BH7 50'	644	490			22
BH 8 6"	5458	5800			
BH 8 5'	1856	2100			
BH 8 10'	644	800			
BH 8 15'	644	640			
BH 8 20'	956	880			
BH 8 25'	956	310			
BH 8 30'	412	370			
BH 8 35'	336	360			
BH 8 40'	<124	64			17
BH 9 6"	5932	4700			
BH 9 5'	1416	1800			
BH 9 10'	1860	800			
BH 9 15'	268	210			
BH 9 20'	148	110			14
BH 10 6"	2008	2200	80	1200	1300
BH 10 5'	592	930	670	2000	2700
BH 10 10'	176	100	1500	4000	5500
BH 10 15'	N/A	170	62	310	370
BH 10 20'	N/A	290	ND	ND	ND