

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-061-01707 County Monongalia District Grant
Quad Morgantown South Pad Name MIP Field/Pool Name _____
Farm name Enroute Properties, LLC Well Number 3H
Operator (as registered with the OOG) Northeast Natural Energy LLC
Address 707 Virginia St. East, Suite 1200 City Charleston State WV Zip 25301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4384061.3 Easting 587904.3
Landing Point of Curve Northing 4384099.3 Easting 587695.9
Bottom Hole Northing 4385578.2 Easting 586592.1

Elevation (ft) 1,058' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Synthetic Based Mud for horizontal section - BIO-BASE 365, CALCIUM CHLORIDE POWDER, G-SEAL PLUS, HRP, LIME, M-I WATE (BARITE), M-I-X II MEDIUM,
MEGADRIL P SYSTEM, MEGADRIL P SYSTEM RENTAL, MEGAMUL, SAFE-CARB 250, VERSATHIN HF, VERSAWET, VG-PLUS, VINSEAL MEDIUM, WALNUT NUT PLUG MEDIUM

Date permit issued 4/7/2015 Date drilling commenced 6/28/2015 Date drilling ceased 9/13/2015
Date completion activities began 11/6/2015 Date completion activities ceased 11/15/2015
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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Freshwater depth(s) ft 300' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 700'; 1,440'; 2,120' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 295' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

MPK

AX WS 04/17/16
06/17/2016

APPROVED

NAME: Jacqueline Hunter

DATE: 6/16/2016

API 47-061 - 01707 Farm name Enroute Properties, LLC Well number 3H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30	24	42'	N	N/A	N/A	Y-to surface
Surface	17.5	13 3/8	493'	N	54.5	N/A	Y - 7 bbl return
Coal							
Intermediate 1	12.25	9 5/8	1,781'	N	40	N/A	Y - 2 bbl return
Intermediate 2							
Intermediate 3							
Production	8.5	5.5	13,861'	N	20	N/A	Y-4 bbl return
Tubing	4.771	<u>2.875</u> <u>2.375</u>	7,714'	N	4.7	N/A	
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	4,500 psi ready mix	36.4		.75	27.27	CTS	48
Surface	Class A	1004	15.2	1.27	1,271	CTS	8
Coal							
Intermediate 1	Class A	858	15.2	1.26	1,074	CTS	8
Intermediate 2							
Intermediate 3							
Production	50/50 Premium NE-1.3% R-0.3% MPA170	3192	14.5	1.17	2,661	CTS	48
Tubing							

Drillers TD (ft) 13,874' (Pilot: 7,840') Loggers TD (ft) 13,836'

Deepest formation penetrated Pilot: Oriskany Plug back to (ft) 6,080'

Plug back procedure Plugged back with solid cement. Please see attached cement report.

Kick off depth (ft) 6,312'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Surface: bow spring centralizers every 3rd joint or aprox 120'

Intermediate: bow spring centralizers every 3rd joint or aprox 120'

Production: Hard bodied spiral centralizers every other joint or aprox 80' from TD to KOP then bow spring from KOP to 9 5/8" every forth joint or aprox 140'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Completed in a multi-stage plug-and-perforate manner.
See attached documentation.

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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Office of Oil & Gas

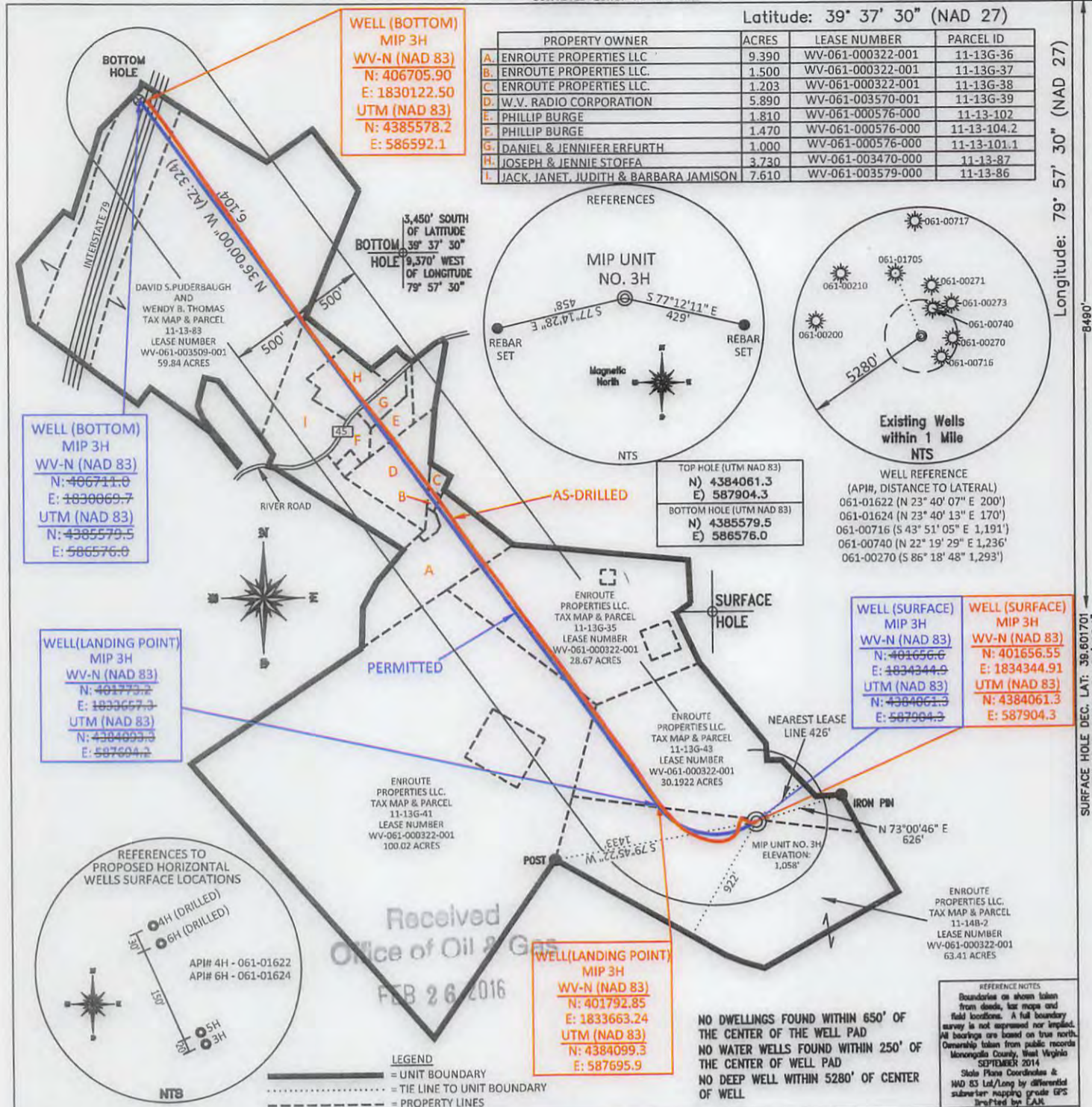
FEB 26 2016

SURFACE HOLE DEC. LONG: 79.976335
 SURVEYED LONG: 79° 58' 34.8"

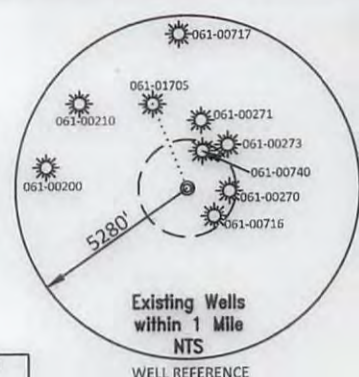
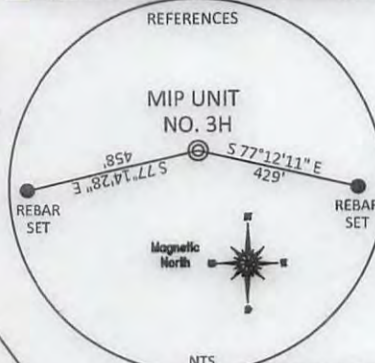
5070'

Latitude: 39° 37' 30" (NAD 27)

Longitude: 79° 57' 30" (NAD 27)



PROPERTY OWNER	ACRES	LEASE NUMBER	PARCEL ID
A. ENROUTE PROPERTIES LLC	9.390	WV-061-000322-001	11-13G-36
B. ENROUTE PROPERTIES LLC	1.500	WV-061-000322-001	11-13G-37
C. ENROUTE PROPERTIES LLC	1.203	WV-061-000322-001	11-13G-38
D. W.V. RADIO CORPORATION	5.890	WV-061-003570-001	11-13G-39
E. PHILLIP BURGE	1.810	WV-061-000576-000	11-13-102
F. PHILLIP BURGE	1.470	WV-061-000576-000	11-13-104.2
G. DANIEL & JENNIFER ERFURTH	1.000	WV-061-000576-000	11-13-101.1
H. JOSEPH & JENNIE STOFFA	3.730	WV-061-003470-000	11-13-87
I. JACK, JANET, JUDITH & BARBARA JAMISON	7.610	WV-061-003579-000	11-13-86



TOP HOLE (UTM NAD 83)	N) 4384061.3
E) 587904.3	
BOTTOM HOLE (UTM NAD 83)	N) 4385579.5
E) 586576.0	

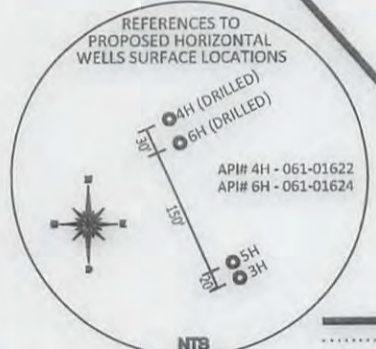
WELL REFERENCE (API#, DISTANCE TO LATERAL)	061-01622 (N 23° 40' 07" E 200')
	061-01624 (N 23° 40' 13" E 170')
	061-00716 (S 43° 51' 05" E 1,191')
	061-00740 (N 22° 19' 29" E 1,236')
	061-00270 (S 86° 18' 48" E 1,293')

WELL (BOTTOM) MIP 3H
 WV-N (NAD 83)
 N: 406711.0
 E: 1830069.7
 UTM (NAD 83)
 N: 4385579.5
 E: 586576.0

WELL (LANDING POINT) MIP 3H
 WV-N (NAD 83)
 N: 401792.2
 E: 1833663.3
 UTM (NAD 83)
 N: 4384099.3
 E: 587695.9

WELL (SURFACE) MIP 3H
 WV-N (NAD 83)
 N: 401656.6
 E: 1834344.9
 UTM (NAD 83)
 N: 4384061.3
 E: 587904.3

WELL (SURFACE) MIP 3H
 WV-N (NAD 83)
 N: 401656.55
 E: 1834344.91
 UTM (NAD 83)
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 E: 587904.3



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LEGEND
 — UNIT BOUNDARY
 - - - TIE LINE TO UNIT BOUNDARY
 - - - PROPERTY LINES

NO DWELLINGS FOUND WITHIN 650' OF THE CENTER OF THE WELL PAD
 NO WATER WELLS FOUND WITHIN 250' OF THE CENTER OF WELL PAD
 NO DEEP WELL WITHIN 5280' OF CENTER OF WELL

REFERENCE NOTES
 Boundaries as shown taken from deeds, lot maps and field locations. A full boundary survey is not expressed nor implied. All bearings are based on true north. Ownership taken from public records Monongalia County, West Virginia SEPTEMBER 2014 State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS furnished by EAM.

FILE #: NNE004
 DRAWING #: 2443
 SCALE: 1"=1000'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE SUBMETER MAPPING OF ELEVATION: GRADE GPS

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 Signed:
 L.L.S. #2124 : Ernest J. Benckek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: JANUARY 11, 2016

OPERATOR'S WELL #: MIP UNIT NO. 3H AS-DRILLED

API WELL #: 47 STATE 61 COUNTY 01707 PERMIT

Well Type: Oil Waste Diposal Production Deep Gas Liquid Injection Storage Shallow AS-BUILT

WATERSHED: UPPER MONONGAHELA ELEVATION: 1,058'

COUNTY/DISTRICT: MONONGALIA/GRANT QUADRANGLE: MORGANTOWN SOUTH

SURFACE OWNER: ENROUTE PROPERTIES LLC. ACREAGE: 63.41 +/-

OIL & GAS ROYALTY OWNER: ENROUTE PROPERTIES LLC. ACREAGE: 316.115 +/- 06/17/2016

LEASE NUMBERS: _____

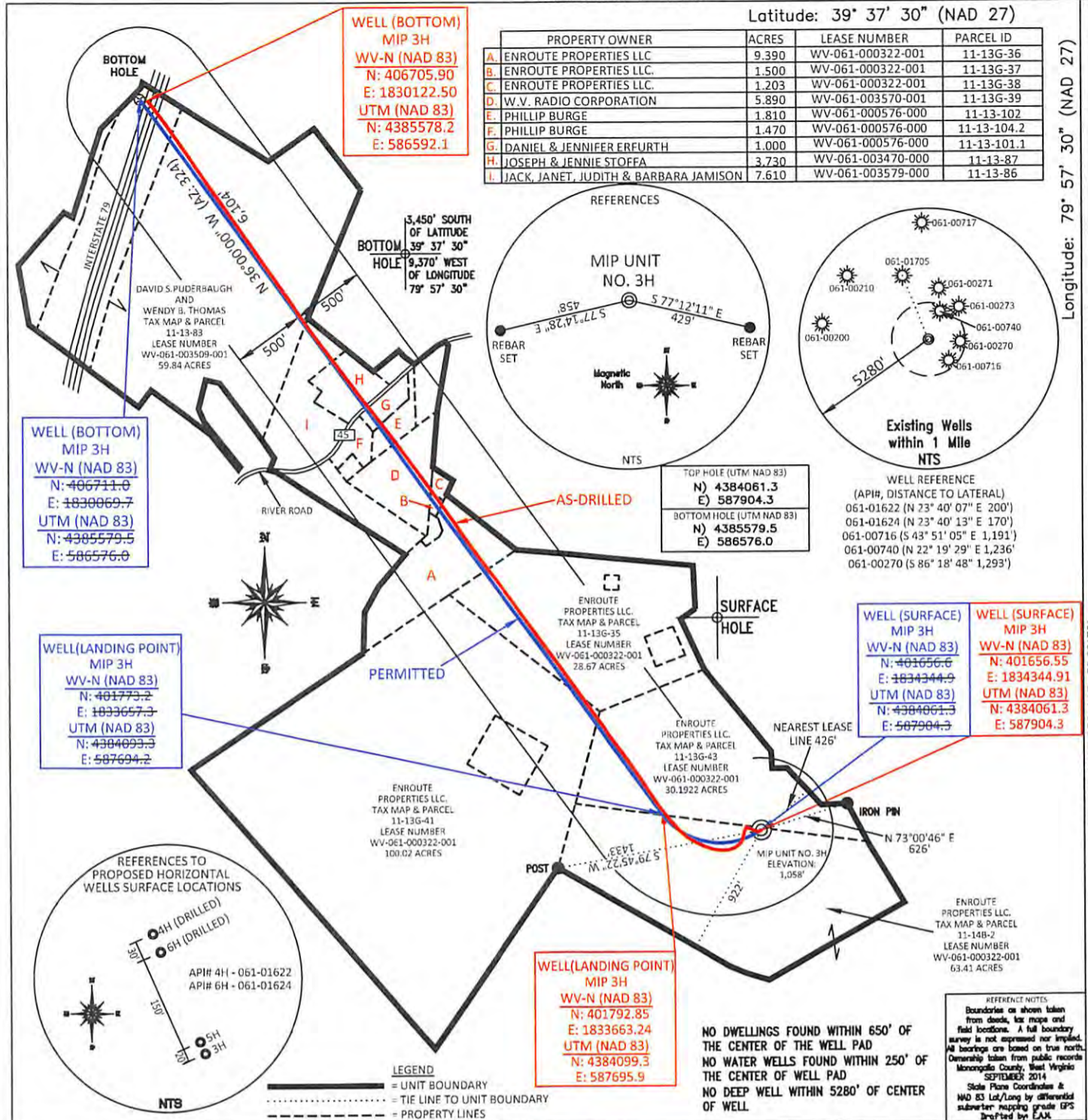
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: PILOT: 7,413' TVD: 7,501' TMD: 13,874'

WELL OPERATOR : NORTHEAST NATURAL ENERGY DESIGNATED AGENT : JOHN ADAMS

ADDRESS: 707 VIRGINIA STREET - SUITE 1200 ADDRESS: 707 VIRGINIA STREET - SUITE 1200

CITY: CHARLESTON STATE: WV ZIP CODE: 25301 CITY: CHARLESTON STATE: WV ZIP CODE: 25301



WELL (BOTTOM)
 MIP 3H
 WV-N (NAD 83)
 N: 406705.90
 E: 1830122.50
 UTM (NAD 83)
 N: 4385578.2
 E: 586592.1

WELL (BOTTOM)
 MIP 3H
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 State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS drafted by EAM

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06/17/2016

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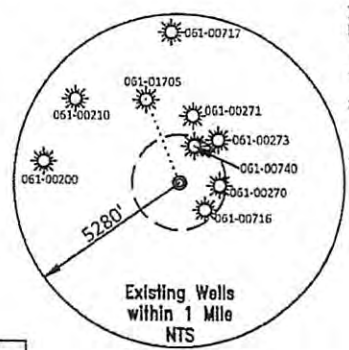
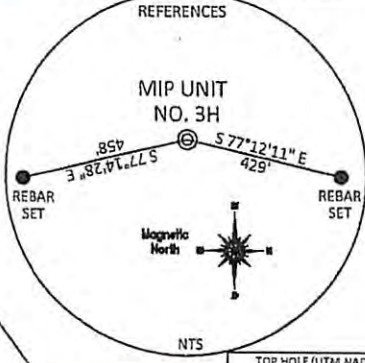
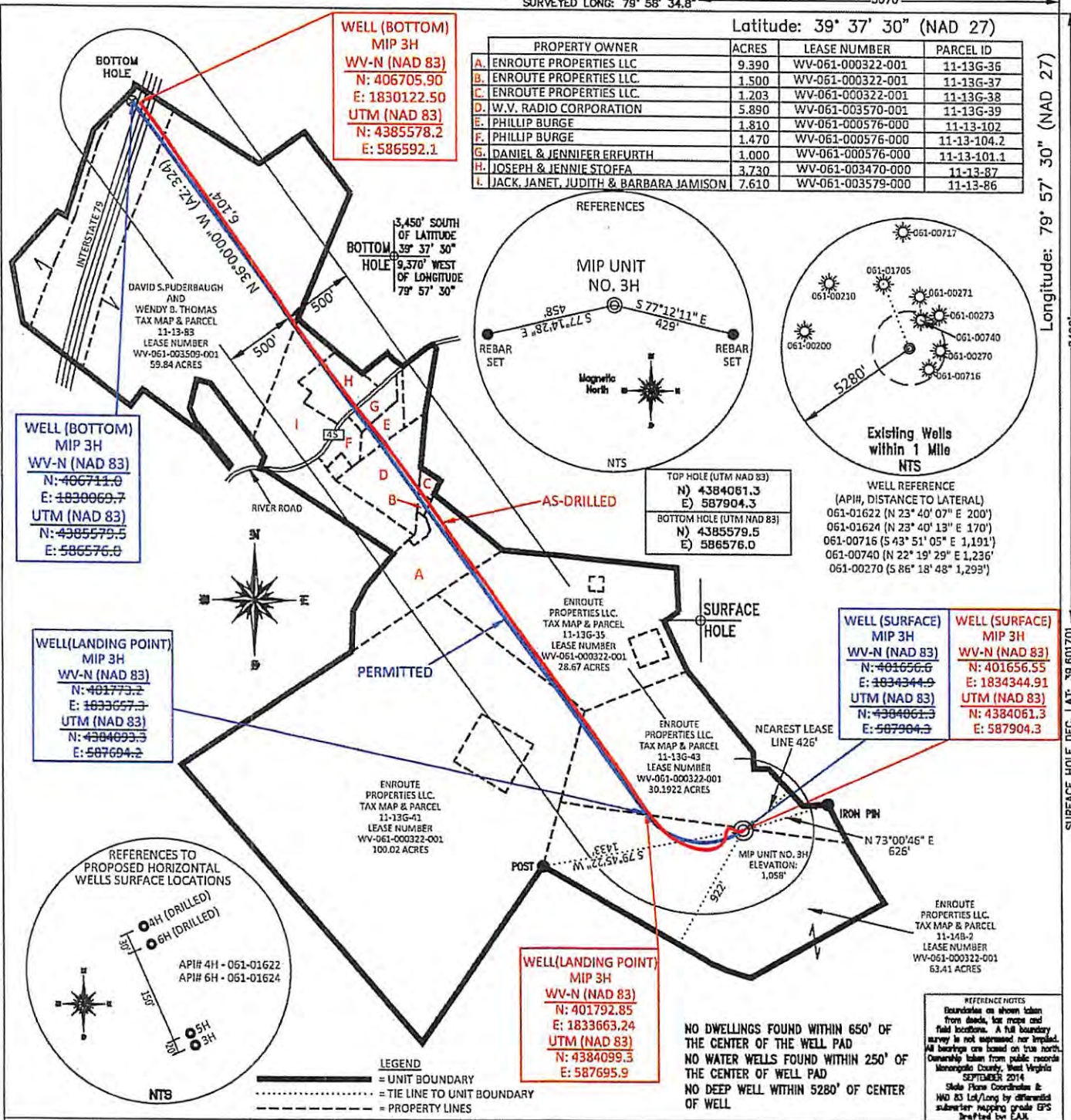
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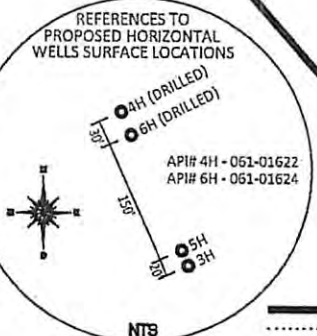
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WELL REFERENCE (API# DISTANCE TO LATERAL)
 061-01622 (N 23° 40' 07\"/>



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DATE: JANUARY 11, 2016
 OPERATOR'S WELL #: MIP UNIT NO. 3H AS-DRILLED
 API WELL #: 47 61 01707
 STATE COUNTY PERMIT

06/17/2016

Lithology/Formation	Top Depth in FT TVD	Bottom Depth in FT TVD	Top Depth in FT MD	Bottom Depth in FT MD	Describe rock type and record quantity and type of fluid (freshwater, brine, oil, gas, H2S, etc)
Grey Shale/sandstone	0	762			sand/shale
Red Rock	762	820			red rock
Grey Sandstone	820	945			sandstone
Red Rock/shale	945	1050			red rock/shale
Grey Sandstone	1050	1120			sandstone
Grey Shale	1120	1132			shale
White Sandstone	1132	1440			sandstone
Grey Shale/sand	1440	1980			sand/shale
Red Rock	1980	2070			red rock
Geneseo	7164	7190	7249	7278	shale
Tully	7190	7281	7278	7408	limestone
Hamilton	7281	7426	7408	7706	shale
Marcellus	7426		7706		shale

Received
Office of Oil & Gas

FEB 23 2016

MIP 3H PILOT - API # 47-061-01707

Lithology/Formation	Top Depth in FT TVD	Bottom Depth in FT TVD	Top Depth in FT MD	Bottom Depth in FT MD	Describe rock type and record quantity and type of fluid (freshwater, brine, oil, gas, H2S, etc)
Grey Shale/sandstone	0	762			sand/shale
Red Rock	762	820			red rock
Grey Sandstone	820	945			sandstone
Red Rock/shale	945	1050			red rock/shale
Grey Sandstone	1050	1120			sandstone
Grey Shale	1120	1132			shale
White Sandstone	1132	1440			sandstone
Grey Shale/sand	1440	1980			sand/shale
Red Rock	1980	2070			red rock
Geneseo	7175	7198	7176	7201	shale
Tully	7198	7288	7201	7292	limestone
Hamilton	7288	-	7292	7460	shale
*drilling stopped at 7445' MD. We then picked up coring tools. No gamma available while coring, so the picks below are based on mud logging samples and ROP.					
Marcellus			7460	7526	shale
Cherry Valley			7526	7553	limestone
Onondaga			7553	7590	limestone
Huntersville			7590	7760	chert
Oriskany			7760		sandstone

Received
Office of Oil & Gas
FEB 26 2016



Cementing Service Report

Customer				Job Number				
NORTHEAST NATURAL ENERGY LLC				DCHA-00052				
Well		Location (legal)		Schlumberger Location		Job Start		
MIP Unit 3H						Jul/07/2015		
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD	
UNDESIGNAT				deg	17.5 in	508.0 ft	508.0 ft	
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient	
Monongalia		West Virginia		500 psi	65 degF	74 degF	lb/gal	
Well Master		API/UWI						
0631643025		4706101707H000						
Rig Name	Drilled For	Service Via	Casing/Liner					
US Energy 9	Gas	Land	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone	Well Class	Well Type	508.0	13.4	54.5	110		
	New	Development	50.0	20.0	94.0			
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
		lb/gal	cP	T/D	Depth, ft	Size, in	Weight, lb/ft	
Service Line	Job Type							
Cementing	13 3/8" Surface							
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection	Perforations/Open Hole					
psi	psi	Single Cement head	Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval	
			ft	ft			ft	
			ft	ft			Diameter	
			ft	ft			in	
Service Instructions		Treat Down	Displacement	Packer Type	Packer Depth			
Cement 13 3/8" Surface		Casing	bbl		ft			
Ptest 2000psi		Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.			
Top 600psi		bbl	bbl	bbl	bbl			
54bbl Water								
25bbl gel								
10bbl water								
100bbl cement @ 15.6ppg (470sk, 1.2cuft/sk, 5.251gps, D901 Class A, 2% S001, 0.2% D046, 0.13lb/sk D130)								
Drop top plug								
71bbl displacement								
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>	Casing Tools		Squeeze Job			
Lift Pressure		205 psi	Shoe Type	Float	Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>	Shoe Depth	507.8 ft	Tool Type			
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type	Tool Depth			
					ft			
Cement Head Type		Stage Tool Depth	ft	Tail Pipe Size	in			
Job Scheduled For		Arrived on Location	Leave Location	Collar Type	Float	Tail Pipe Depth		
Jul/07/2015 15:30		Jul/07/2015 15:30	Jul/07/2015 19:30	Collar Depth	462.9 ft	Sqz. Total Vol.		
						bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message
07/07/2015	17:01:41	0	0.0	-0.00	0.0	0.0	0.0	Started Acquisition
07/07/2015	17:16:31	3	0.0	-0.00	0.0	0.0	0.0	Start Job
07/07/2015	17:16:41	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:17:25	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:18:11	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:18:56	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:19:41	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:20:26	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:21:11	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:21:56	2	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:22:41	1	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:23:26	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:24:11	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:24:56	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:25:41	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:26:26	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:27:11	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:27:56	4	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:28:41	4	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:29:26	3	0.0	-0.00	0.0	0.0	0.0	
07/07/2015	17:30:11	7	0.0	-0.00	0.0	0.0	0.0	

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Well			Field			Job Start		Customer	Job Number
MIP Unit 3H 3H			UNDESIGNAT			Jul/07/2015		NORTHEAST NATURAL ENERGY LLC	DCHA-00052
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message	
07/07/2015	17:31:41	10	0.0	8.38	0.0	0.0	0.0		
07/07/2015	17:32:26	10	0.0	8.38	0.0	0.0	0.0		
07/07/2015	17:33:11	879	0.5	8.37	0.1	0.0	0.1		
07/07/2015	17:33:56	716	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:34:41	2121	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:35:26	2106	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:36:11	11	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:36:56	11	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:37:41	12	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:38:26	12	0.0	8.37	0.1	0.0	0.1		
07/07/2015	17:39:11	62	3.6	8.37	0.3	0.0	0.3	Pressure Test Lines	
07/07/2015	17:39:13	61	4.4	8.38	0.4	0.0	0.4	Start Pumping Water	
07/07/2015	17:39:56	60	5.9	8.76	3.7	0.0	3.7		
07/07/2015	17:40:41	60	4.5	8.75	7.4	0.0	7.4		
07/07/2015	17:41:26	78	5.9	8.57	11.0	0.0	11.0		
07/07/2015	17:42:11	80	6.7	8.50	15.8	0.0	15.8		
07/07/2015	17:42:56	93	6.7	8.43	20.8	0.0	20.8		
07/07/2015	17:43:41	87	6.7	8.40	25.9	0.0	25.9		
07/07/2015	17:44:26	91	6.7	8.39	30.9	0.0	30.9		
07/07/2015	17:45:11	92	6.7	8.39	36.0	0.0	36.0		
07/07/2015	17:45:56	90	6.7	8.38	41.0	0.0	41.0		
07/07/2015	17:46:41	96	6.7	8.38	46.1	0.0	46.1		
07/07/2015	17:47:26	91	6.7	8.38	51.1	0.0	51.1		
07/07/2015	17:47:59	8	1.4	8.38	54.6	0.0	54.6	End Water	
07/07/2015	17:48:00	13	0.7	8.38	54.6	0.0	54.6	Reset Total, Vol = 54.60 bbl	
07/07/2015	17:48:01	11	0.4	8.38	0.0	0.0	54.6	Start Pumping Spacer	
07/07/2015	17:48:11	16	0.0	8.39	0.0	0.0	54.6		
07/07/2015	17:48:56	22	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:49:41	23	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:50:26	24	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:51:11	23	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:51:56	23	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:52:41	24	0.0	8.39	0.0	0.0	54.6		
07/07/2015	17:53:26	24	0.0	8.38	0.0	0.0	54.6		
07/07/2015	17:54:11	71	0.0	-0.00	1.2	0.0	55.8		
07/07/2015	17:54:56	107	5.0	8.46	3.0	0.0	57.6		
07/07/2015	17:55:41	75	6.6	8.43	7.9	0.0	62.5		
07/07/2015	17:56:26	75	6.6	8.49	12.8	0.0	67.4		
07/07/2015	17:57:11	88	6.7	8.41	17.8	0.0	72.4		
07/07/2015	17:57:56	98	6.6	8.53	22.8	0.0	77.4		
07/07/2015	17:58:41	89	7.1	8.00	27.8	0.0	82.4		
07/07/2015	17:58:42	78	7.1	7.93	27.9	0.0	82.5	Start Pumping Water	
07/07/2015	17:59:26	106	6.6	8.42	32.9	0.0	87.5		
07/07/2015	17:59:55	22	0.5	0.38	35.4	0.0	90.0	End Water	
07/07/2015	17:59:56	21	0.1	0.18	35.4	0.0	90.0	End Spacer	
07/07/2015	17:59:57	21	0.1	0.18	35.4	0.0	90.0	Reset Total, Vol = 35.39 bbl	
07/07/2015	18:00:11	34	0.0	-0.00	0.0	0.0	90.0		
07/07/2015	18:00:56	44	0.0	8.37	0.0	0.0	90.0		
07/07/2015	18:01:41	44	0.0	8.37	0.0	0.0	90.0		
07/07/2015	18:02:26	45	0.0	8.37	0.0	0.0	90.0		
07/07/2015	18:03:11	45	0.0	8.37	0.0	0.0	90.0		
07/07/2015	18:03:56	43	0.0	8.36	0.0	0.0	90.0		
07/07/2015	18:04:41	43	0.0	8.35	0.0	0.0	90.0		
07/07/2015	18:05:26	42	0.0	8.37	0.0	0.0	90.0		

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Well			Field			Job Start		Customer		Job Number	
MIP Unit 3H 3H			UNDESIGNAT			Jul/07/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00052	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
07/07/2015	18:06:56	41	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:07:41	41	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:08:26	41	0.0	8.35	0.0	0.0	90.0				
07/07/2015	18:09:11	41	0.0	8.35	0.0	0.0	90.0				
07/07/2015	18:09:56	41	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:10:41	41	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:11:26	40	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:12:11	40	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:12:56	40	0.0	8.36	0.0	0.0	90.0				
07/07/2015	18:13:41	133	4.7	15.16	2.5	0.0	92.5				
07/07/2015	18:14:26	165	4.7	15.27	6.0	0.0	96.0				
07/07/2015	18:14:36	155	4.7	15.26	6.8	0.0	96.8	Start Cement Slurry			
07/07/2015	18:14:37	154	4.7	15.26	6.9	0.0	96.9	Start Mixing Tail Slurry			
07/07/2015	18:15:11	141	4.7	15.26	9.6	0.0	99.5				
07/07/2015	18:15:56	145	4.8	15.55	13.1	0.0	103.1				
07/07/2015	18:16:41	157	4.7	15.53	16.6	0.0	106.6				
07/07/2015	18:17:26	147	4.7	15.54	20.2	0.0	110.2				
07/07/2015	18:18:11	152	4.7	15.63	23.8	0.0	113.7				
07/07/2015	18:18:56	156	4.7	15.62	27.3	0.0	117.3				
07/07/2015	18:19:41	220	6.6	15.63	31.8	0.0	121.8				
07/07/2015	18:20:26	210	6.6	15.67	36.7	0.0	126.7				
07/07/2015	18:21:11	193	6.6	15.67	41.7	0.0	131.7				
07/07/2015	18:21:56	213	6.6	15.63	46.7	0.0	136.7				
07/07/2015	18:22:41	138	4.7	15.60	50.7	0.0	140.7				
07/07/2015	18:23:26	129	4.7	15.63	54.2	0.0	144.2				
07/07/2015	18:24:11	130	4.7	15.60	57.8	0.0	147.8				
07/07/2015	18:24:56	125	4.7	15.54	61.3	0.0	151.3				
07/07/2015	18:25:41	99	3.7	15.62	64.2	0.0	154.2				
07/07/2015	18:26:26	96	3.7	15.62	67.0	0.0	157.0				
07/07/2015	18:27:11	98	3.7	15.59	69.8	0.0	159.8				
07/07/2015	18:27:56	125	4.7	15.50	72.7	0.0	162.7				
07/07/2015	18:28:41	137	4.7	15.79	76.2	0.0	166.2				
07/07/2015	18:29:26	131	4.7	15.64	79.8	0.0	169.8				
07/07/2015	18:30:11	141	4.7	15.66	83.3	0.0	173.3				
07/07/2015	18:30:56	130	4.7	15.69	86.8	0.0	176.8				
07/07/2015	18:31:41	129	4.7	15.64	90.3	0.0	180.3				
07/07/2015	18:32:16	134	4.8	15.63	93.1	0.0	183.1	End Tail Slurry			
07/07/2015	18:32:18	134	4.8	15.63	93.3	0.0	183.2	End Cement Slurry			
07/07/2015	18:32:26	143	4.8	15.62	93.9	0.0	183.9				
07/07/2015	18:33:11	130	4.9	14.90	97.5	0.0	187.5				
07/07/2015	18:33:56	132	4.8	14.74	101.1	0.0	191.1				
07/07/2015	18:34:18	46	1.2	13.75	102.7	0.0	192.7	Reset Total, Vol = 102.70 bbl			
07/07/2015	18:34:20	47	0.4	13.72	0.0	0.0	192.7	Drop Top Plug			
07/07/2015	18:34:41	45	0.0	13.69	0.0	0.0	192.7				
07/07/2015	18:35:26	43	0.0	13.66	0.0	0.0	192.7				
07/07/2015	18:36:11	44	0.0	13.66	0.0	0.0	192.7				
07/07/2015	18:36:56	88	4.7	9.23	1.8	1.7	194.5				
07/07/2015	18:37:41	51	4.7	9.02	5.4	5.3	198.0				
07/07/2015	18:38:26	94	6.7	8.89	10.2	10.0	202.8				
07/07/2015	18:39:11	98	6.7	8.73	15.2	15.0	207.8				
07/07/2015	18:39:56	101	6.7	8.62	20.2	20.0	212.9				
07/07/2015	18:40:41	114	6.7	8.52	25.2	25.0	217.9				
07/07/2015	18:41:26	121	6.7	8.46	30.2	30.1	222.9				
07/07/2015	18:42:11	149	6.6	8.36	35.2	35.0	227.9				

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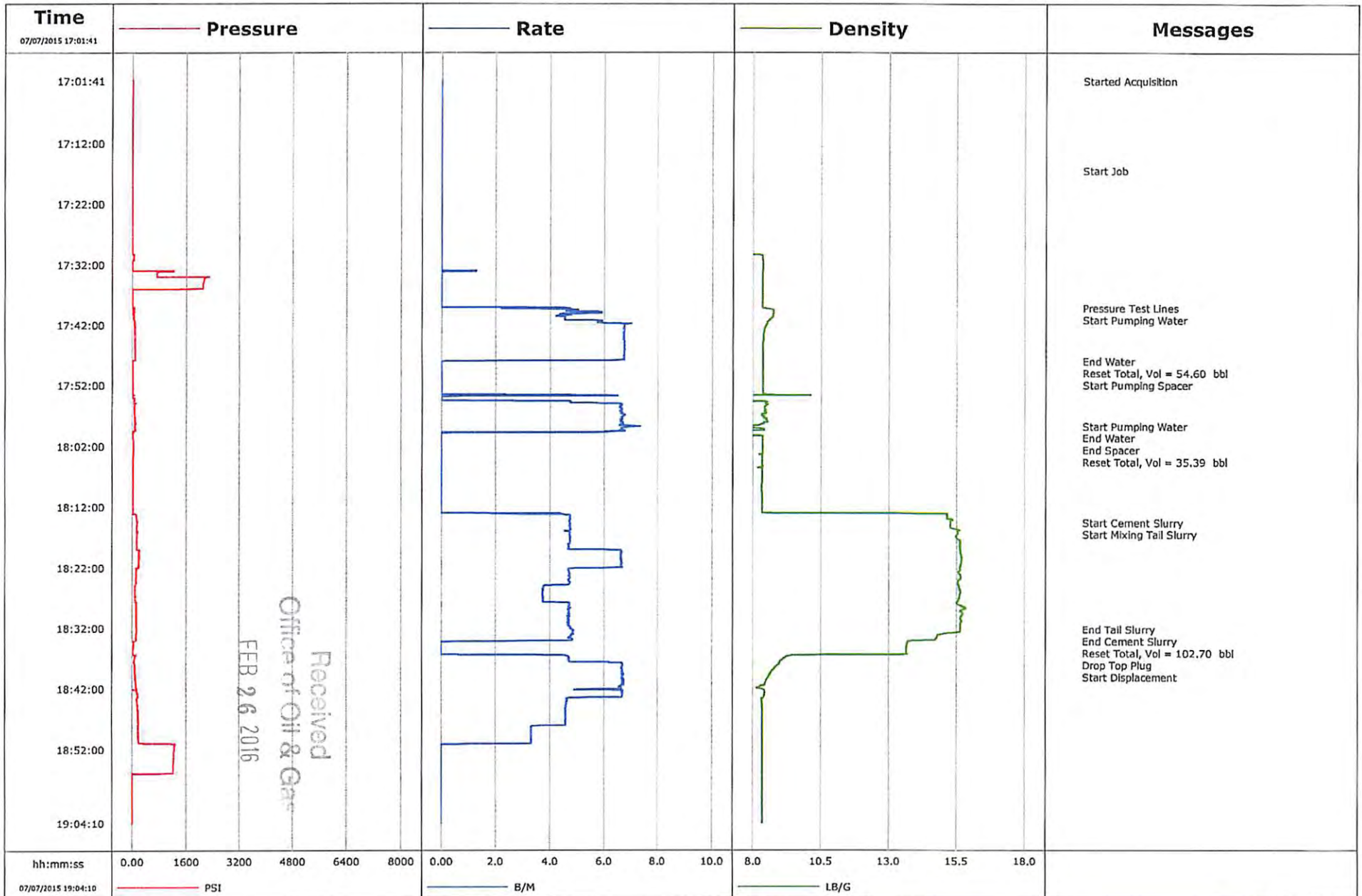
Well			Field			Job Start		Customer		Job Number
MIP Unit 3H 3H			UNDESIGNAT			Jul/07/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00052
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message		
07/07/2015	18:43:41	149	4.6	8.38	44.8	44.7	237.5			
07/07/2015	18:44:26	160	4.6	8.37	48.3	48.2	241.0			
07/07/2015	18:45:11	170	4.6	8.37	51.7	51.6	244.4			
07/07/2015	18:45:56	179	4.6	8.37	55.2	55.1	247.9			
07/07/2015	18:46:41	186	4.6	8.37	58.6	58.5	251.3			
07/07/2015	18:47:26	192	4.6	8.37	62.1	62.0	254.7			
07/07/2015	18:48:11	178	3.7	8.37	65.5	65.4	258.1			
07/07/2015	18:48:56	185	3.3	8.37	68.0	67.9	260.6			
07/07/2015	18:49:41	194	3.3	8.37	70.5	70.4	263.1			
07/07/2015	18:50:26	197	3.3	8.37	72.9	72.9	265.6			
07/07/2015	18:51:11	1267	2.6	8.37	75.4	75.4	268.1			
07/07/2015	18:51:56	1247	0.0	8.37	75.5	75.5	268.2			
07/07/2015	18:52:41	1239	0.0	8.37	75.5	75.5	268.2			
07/07/2015	18:53:26	1232	0.0	8.37	75.5	75.5	268.2			
07/07/2015	18:54:11	1227	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:54:56	1221	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:55:41	1217	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:56:26	8	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:57:11	9	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:57:56	9	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:58:41	11	0.0	8.38	75.5	75.5	268.2			
07/07/2015	18:59:26	12	0.0	8.38	75.5	75.5	268.2			
07/07/2015	19:00:11	9	0.0	8.38	75.5	75.5	268.2			
07/07/2015	19:00:56	6	0.0	8.38	75.5	75.5	268.2			
07/07/2015	19:01:41	7	0.0	8.38	75.5	75.5	268.2			
07/07/2015	19:02:26	7	0.0	8.38	75.5	75.5	268.2			
07/07/2015	19:03:11	7	0.0	8.38	75.5	75.5	268.2			

Post Job Summary

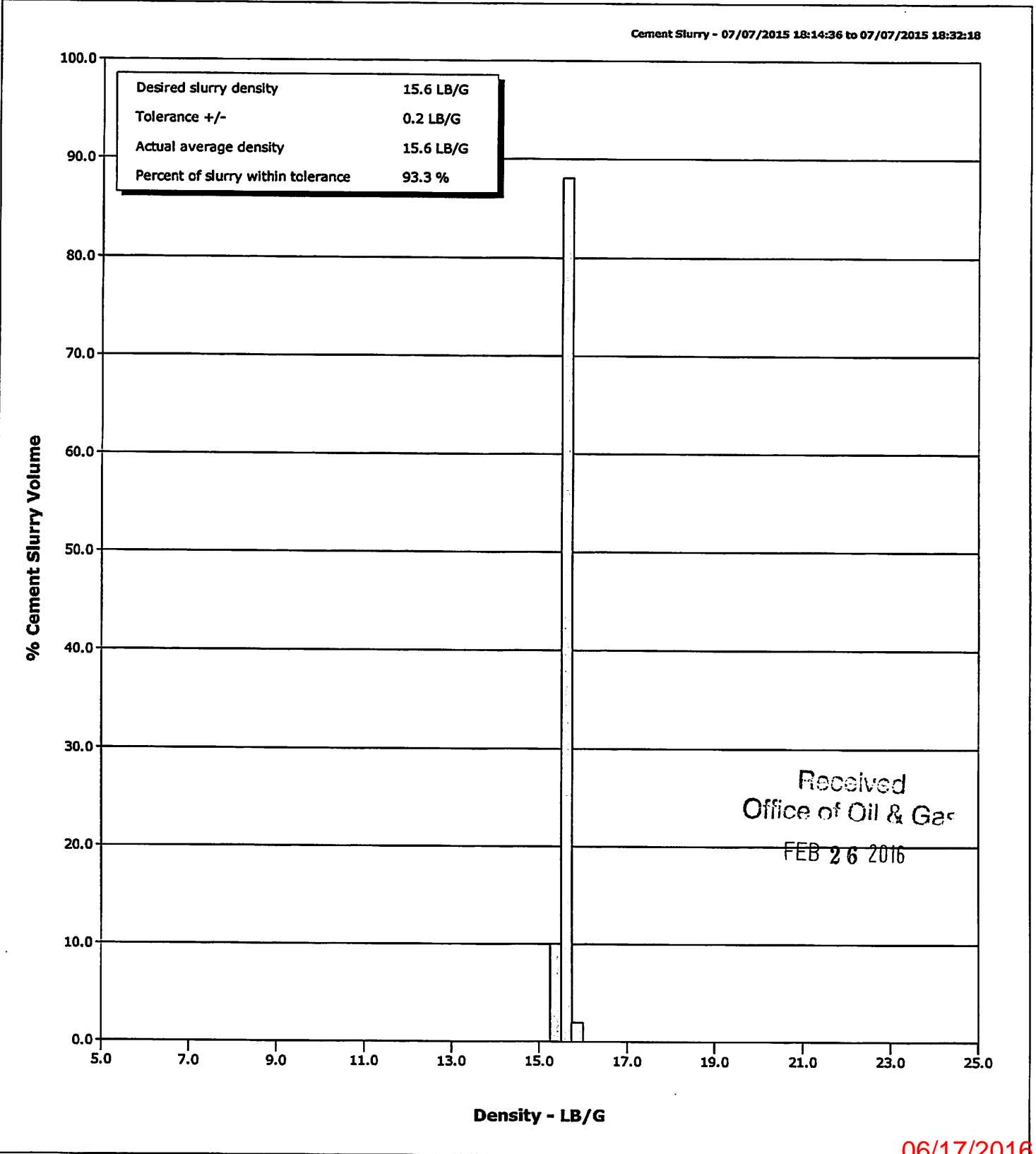
Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
5.2			7.3	268.2	0.0	90.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2274	7	151	1200			bbl	lb/gal
Avg. N2 Percent %		Designed Slurry Volume		Displacement		Cement Circulated to Surface? <input checked="" type="checkbox"/>	
		0.0 bbl		75.5 bbl		Volume 25.0 bbl	
				Mix Water Temp 72 degF		Washed Thru Perfs <input type="checkbox"/>	
						To ft	
Customer or Authorized Representative			Schlumberger Supervisor			Circulation Lost <input type="checkbox"/>	
Jim Cover			TJ Williams			Job Completed <input checked="" type="checkbox"/>	
						-	

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Well	MIP Unit 3H	Client	NORTHEAST NATURAL ENERGY LLC
Field	UNDESIGNAT	SIR No.	DCHA-00052
Engineer	TJ Williams	Job Type	13 3/8" Surface
Country	USA	Job Date	07-07-2015



Well	MIP Unit 3H	Client	NORTHEAST NATURAL ENERGY LLC
Field	UNDESIGNAT	SIR No.	DCHA-00052
Engineer	TJ Williams	Job Type	13 3/8" Surface
Country	USA	Job Date	07-07-2015



Customer Northeast Natural Energy LLC				Job Number DCHA-0053				
Well MIP Unit 3H 3H		Location (legal)		Schlumberger Location		Job Start Jul/10/2015		
Field Undesignated		Formation Name/Type Clean-Sandstone		Deviation deg	Bit Size 12.3 in	Well MD 1827.0 ft	Well TVD 1827.0 ft	
County Monongalia		State/Province West Virginia		BHP 1500 psi	BHST 79 degF	BHCT 75 degF	Pore Press. Gradient lb/gal	
Well Master 631643025		API/UWI 4706101707						
Rig Name US Energy 9	Drilled For Gas	Service Via Land	Casing/Liner					
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone	Well Class New	Well Type Development	504.0	13.4	54.5			
			1803.0	9.6	40.0	J55		
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
				T/D	Depth, ft	Size, in	Weight, lb/ft	
Service Line Cementing	Job Type 9 5/8" Intermediate							
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection Single Cement head	Perforations/Open Hole					
			Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft	
			ft	ft			Diameter in	
			ft	ft				
Service Instructions 9 5/8" Intermediate 25bbl Gel spacer with D130 10bbl Water behind 140bbl Tail @ 15.6ppg (D901 Class A 654sk, 1.20cuft/sk, 5.251gps, D046 0.2%, S001 2%, D130 0.13%) Shut down / Drop top plug 133.bbl Displacement			Treat Down Casing	Displacement 133.0 bbl	Packer Type	Packer Depth ft		
			Tubing Vol. bbl	Casing Vol. bbl	Annular Vol. bbl	Openhole Vol. bbl		
Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job			
Lift Pressure 903 psi			Shoe Type Float	Shoe Depth 1803.0 ft	Tool Type	Squeeze Type		
Pipe Rotated <input type="checkbox"/>	Pipe Reciprocated <input type="checkbox"/>							
No. Centralizers 16	Top Plugs 1	Bottom Plugs	Stage Tool Type	Stage Tool Depth ft	Tool Depth ft	Tail Pipe Size in		
Cement Head Type Single								
Job Scheduled For Jul/10/2015 18:00	Arrived on Location Jul/10/2015 18:00	Leave Location Jul/10/2015 23:00	Collar Type Float	Collar Depth 1761.5 ft	Tail Pipe Depth ft	Sqr. Total Vol. bbl		
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENS LB/G	CPF1_DOWNHOLE B/M	CPF1_TTL_STAGE BBL	CMT_DISP_VCCPF1 BBL	CPF1_TTL_VOLUME BBL	Message
07/10/2015	19:16:40	3	8.43	0.0	0.0	0.0	0.0	Started Acquisition
07/10/2015	19:16:42	3	8.43	0.0	0.0	0.0	0.0	Start Job
07/10/2015	19:17:25	2	8.43	0.0	0.0	0.0	0.0	
07/10/2015	19:18:10	2	8.43	0.0	0.0	0.0	0.0	
07/10/2015	19:18:55	2	8.43	0.0	0.0	0.0	0.0	
07/10/2015	19:19:40	2	8.43	0.0	0.0	0.0	0.0	
07/10/2015	19:20:25	-1	8.43	0.0	0.0	0.0	0.0	
07/10/2015	19:21:10	57	8.43	4.6	2.1	0.0	2.1	
07/10/2015	19:21:55	4	8.44	0.0	0.0	0.0	5.2	
07/10/2015	19:22:40	5	8.44	0.0	0.0	0.0	5.2	
07/10/2015	19:23:00	5	8.44	0.0	0.0	0.0	5.2	Water temp 73F, Bulk temp 70F
07/10/2015	19:23:01	5	8.44	0.0	0.0	0.0	5.2	Slurry temp 101F
07/10/2015	19:23:25	892	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:24:10	2937	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:24:55	2872	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:25:40	2845	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:25:43	2844	8.44	0.0	0.1	0.0	5.2	Pressure Test Lines
07/10/2015	19:25:46	2841	8.44	0.0	0.1	0.0	5.2	Reset Total, Vol = 5.23 bbl
07/10/2015	19:26:25	2824	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:27:10	2807	8.44	0.0	0.1	0.0	5.2	
07/10/2015	19:27:55	2792	8.44	0.0	0.1	0.0	5.2	

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Well		Field			Job Start		Customer		Job Number
MIP Unit 3H 3H		Undesignated			Jul/10/2015		Northeast Natural Energy LLC		DCHA-0053
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENS CPF1 LB/G	DOWNHOLE CPF1_TTL STAGE B/M	CMT_DISP_VCCPF1_BBL	CPF1_TTL VOLUME BBL	Message		
07/10/2015	19:29:25	6	8.44	0.0	0.1	0.0	5.2		
07/10/2015	19:30:10	62	8.43	5.2	1.2	0.0	6.3		
07/10/2015	19:30:11	61	8.43	5.3	1.3	0.0	6.4	Start Pumping Water	
07/10/2015	19:30:55	88	8.44	6.6	5.6	0.0	10.8		
07/10/2015	19:31:40	100	8.44	6.8	10.6	0.0	15.8		
07/10/2015	19:32:25	97	8.44	6.9	15.8	0.0	20.9		
07/10/2015	19:33:10	97	8.44	6.9	20.9	0.0	26.1		
07/10/2015	19:33:55	95	8.44	6.7	26.1	0.0	31.2		
07/10/2015	19:34:40	99	8.44	6.9	31.2	0.0	36.4		
07/10/2015	19:35:25	102	8.44	6.9	36.4	0.0	41.6		
07/10/2015	19:36:10	97	8.43	6.9	41.5	0.0	46.7		
07/10/2015	19:36:55	103	8.43	7.0	46.7	0.0	51.9		
07/10/2015	19:37:40	108	8.44	7.0	52.0	0.0	57.2		
07/10/2015	19:38:25	102	8.44	7.0	57.3	0.0	62.4		
07/10/2015	19:39:55	94	8.44	7.1	67.8	0.0	73.0		
07/10/2015	19:40:40	103	8.44	7.0	73.1	0.0	78.2		
07/10/2015	19:41:25	103	8.43	7.0	78.3	0.0	83.5		
07/10/2015	19:42:10	99	8.43	7.0	83.6	0.0	88.8		
07/10/2015	19:42:55	106	8.44	7.0	88.9	0.0	94.1		
07/10/2015	19:43:40	103	8.44	7.1	94.2	0.0	99.4		
07/10/2015	19:44:25	108	8.44	7.1	99.5	0.0	104.6		
07/10/2015	19:45:10	50	8.44	5.2	103.7	0.0	108.9		
07/10/2015	19:45:55	48	8.44	5.2	107.6	0.0	112.8		
07/10/2015	19:46:40	46	8.44	5.2	111.5	0.0	116.7		
07/10/2015	19:47:25	46	8.43	5.2	115.4	0.0	120.6		
07/10/2015	19:48:10	47	8.44	5.2	119.3	0.0	124.4		
07/10/2015	19:48:55	47	8.44	5.2	123.2	0.0	128.4		
07/10/2015	19:49:40	48	8.44	5.2	127.1	0.0	132.3		
07/10/2015	19:50:25	47	8.44	5.2	131.0	0.0	136.2		
07/10/2015	19:51:10	48	8.43	5.2	134.9	0.0	140.1		
07/10/2015	19:51:55	47	8.44	5.2	138.8	0.0	144.0		
07/10/2015	19:52:40	47	8.44	5.2	142.7	0.0	147.9		
07/10/2015	19:53:25	46	8.44	5.2	146.6	0.0	151.8		
07/10/2015	19:54:10	56	8.44	4.9	150.4	0.0	155.5		
07/10/2015	19:54:55	1	8.44	0.0	153.0	0.0	158.1		
07/10/2015	19:55:33	5	8.44	0.0	0.0	0.0	158.1	End Water	
07/10/2015	19:55:36	5	8.44	0.0	0.0	0.0	158.1	Reset Total, Vol = 152.90 bbl	
07/10/2015	19:55:40	5	8.44	0.0	0.0	0.0	158.1		
07/10/2015	19:56:25	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	19:57:10	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	19:57:55	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	19:58:40	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	19:59:25	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	20:00:10	6	8.44	0.0	0.0	0.0	158.1		
07/10/2015	20:00:55	7	8.44	0.0	0.0	0.0	158.1		
07/10/2015	20:01:29	42	9.00	3.1	0.1	0.0	158.2	Start Pumping Spacer	
07/10/2015	20:01:40	74	8.69	5.0	0.8	0.0	159.0		
07/10/2015	20:02:25	87	8.75	5.0	4.6	0.0	162.7		
07/10/2015	20:03:10	92	8.78	4.9	8.3	0.0	166.4		
07/10/2015	20:03:55	77	8.72	5.0	12.0	0.0	170.2		
07/10/2015	20:04:40	71	8.67	5.0	15.7	0.0	173.9		
07/10/2015	20:05:25	71	8.64	5.0	19.3	0.0	177.5		
07/10/2015	20:06:10	68	8.64	5.1	23.1	0.0	181.3		
07/10/2015	20:06:40	66	8.50	5.1	0.6	0.0	183.8	End Spacer	

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Well		Field			Job Start		Customer		Job Number
MIP Unit 3H 3H		Undesignated			Jul/10/2015		Northeast Natural Energy LLC		DCHA-0053
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENS/CPF1_LB/G	DOWNHOLE_CPF1_B/M	TTL_STAGE_BBL	CMT_DISP_VCCPF1_BBL	CPF1_TTL_VOLUME_BBL	Message	
07/10/2015	20:06:45	65	8.49	5.1	1.0	0.0	184.3	Start Pumping Water	
07/10/2015	20:06:55	62	8.49	5.2	1.9	0.0	185.1		
07/10/2015	20:07:40	59	8.43	5.1	5.7	0.0	189.0		
07/10/2015	20:08:25	59	8.43	5.2	9.6	0.0	192.8		
07/10/2015	20:08:45	-7	8.41	0.8	11.2	0.0	194.5	End Water	
07/10/2015	20:08:48	-7	8.42	0.0	0.0	0.0	194.5	Reset Total, Vol = 10.41 bbl	
07/10/2015	20:09:10	-7	8.43	0.0	0.0	0.0	194.5		
07/10/2015	20:09:55	-7	8.43	0.0	0.0	0.0	194.5		
07/10/2015	20:10:40	-7	8.43	0.0	0.0	0.0	194.5		
07/10/2015	20:11:25	-6	8.43	0.0	0.0	0.0	194.5		
07/10/2015	20:12:10	-7	8.43	0.0	0.0	0.0	194.5		
07/10/2015	20:12:55	-7	8.44	0.0	0.0	0.0	194.5		
07/10/2015	20:13:40	-7	8.44	0.0	0.0	0.0	194.5		
07/10/2015	20:14:25	-6	8.40	0.0	0.0	0.0	194.5		
07/10/2015	20:14:37	2	9.44	2.2	0.0	0.0	194.5	Start Cement Slurry	
07/10/2015	20:14:47	100	15.37	5.3	0.7	0.0	195.2	Start Mixing Tail Slurry	
07/10/2015	20:15:10	112	15.35	5.1	2.7	0.0	197.1		
07/10/2015	20:15:55	117	15.58	5.1	6.5	0.0	201.0		
07/10/2015	20:16:40	104	15.55	5.0	10.3	0.0	204.8		
07/10/2015	20:17:25	104	15.61	5.1	14.1	0.0	208.6		
07/10/2015	20:18:10	110	15.60	5.1	17.9	0.0	212.3		
07/10/2015	20:18:55	121	15.56	5.1	21.7	0.0	216.2		
07/10/2015	20:19:40	122	15.54	5.0	25.5	0.0	220.0		
07/10/2015	20:20:25	121	15.51	5.1	29.3	0.0	223.8		
07/10/2015	20:21:10	122	15.51	5.1	33.2	0.0	227.6		
07/10/2015	20:21:55	122	15.56	5.1	37.0	0.0	231.5		
07/10/2015	20:22:40	112	15.58	5.1	40.8	0.0	235.3		
07/10/2015	20:23:25	106	15.63	5.1	44.6	0.0	239.1		
07/10/2015	20:24:10	85	15.59	4.4	48.3	0.0	242.7		
07/10/2015	20:24:55	85	15.59	4.4	51.5	0.0	246.0		
07/10/2015	20:25:40	75	15.59	4.2	54.8	0.0	249.3		
07/10/2015	20:26:25	77	15.51	4.2	58.0	0.0	252.5		
07/10/2015	20:27:10	76	15.53	4.2	61.2	0.0	255.6		
07/10/2015	20:27:55	71	15.46	4.1	64.3	0.0	258.8		
07/10/2015	20:28:40	56	15.46	3.7	67.2	0.0	261.7		
07/10/2015	20:29:25	38	15.49	3.0	69.5	0.0	264.0		
07/10/2015	20:30:10	38	15.64	3.0	71.8	0.0	266.3		
07/10/2015	20:30:55	34	15.61	2.8	74.0	0.0	268.5		
07/10/2015	20:31:40	98	15.64	4.7	76.7	0.0	271.2		
07/10/2015	20:32:25	99	15.56	4.7	80.2	0.0	274.7		
07/10/2015	20:33:10	110	15.60	5.0	84.0	0.0	278.5		
07/10/2015	20:33:55	113	15.63	5.0	87.7	0.0	282.2		
07/10/2015	20:34:40	105	15.63	5.0	91.5	0.0	285.9		
07/10/2015	20:35:25	104	15.62	5.0	95.2	0.0	289.7		
07/10/2015	20:36:10	103	15.59	5.0	99.0	0.0	293.4		
07/10/2015	20:36:55	109	15.46	5.0	102.7	0.0	297.2		
07/10/2015	20:37:40	109	15.44	5.0	106.5	0.0	301.0		
07/10/2015	20:38:25	110	15.51	5.1	110.3	0.0	304.7		
07/10/2015	20:39:10	111	15.56	5.1	114.0	0.0	308.5		
07/10/2015	20:39:55	111	15.55	5.0	117.8	0.0	312.3		
07/10/2015	20:40:40	112	15.58	5.1	121.6	0.0	316.1		
07/10/2015	20:41:25	112	15.62	5.1	125.4	0.0	319.9		
07/10/2015	20:42:10	113	15.62	5.1	129.2	0.0	323.6		
07/10/2015	20:42:55	112	15.64	5.0	132.9	0.0	327.4		

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Well		Field				Job Start		Customer		Job Number	
MIP Unit 3H 3H		Undesignated				Jul/10/2015		Northeast Natural Energy LLC		DCHA-0053	
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENS CPF1_LB/G	DOWNHOLE CPF1_B/M	TTL_STAGE BBL	GMT_DISP_VCCPF1_BBL	TTL_VOLUME BBL	Message			
07/10/2015	20:44:25	117	15.64	5.2	140.5	0.0	335.0				
07/10/2015	20:45:10	118	15.64	5.2	144.4	0.0	338.9				
07/10/2015	20:45:55	115	15.63	5.2	148.3	0.0	342.8				
07/10/2015	20:46:40	12	15.64	2.8	152.2	0.0	346.7				
07/10/2015	20:46:45	-7	19.46	0.7	152.4	0.0	346.9	End Tail Slurry			
07/10/2015	20:46:47	-5	20.40	0.6	152.4	0.0	346.9	Reset Total, Vol = 152.43 bbl			
07/10/2015	20:46:50	-5	20.55	0.4	152.4	0.0	346.9	End Cement Slurry			
07/10/2015	20:47:25	-4	18.24	0.0	0.0	0.0	347.0				
07/10/2015	20:47:55	-5	17.79	0.0	0.0	0.0	347.0	Drop Top Plug			
07/10/2015	20:48:10	-5	17.69	0.0	0.0	0.0	347.0				
07/10/2015	20:48:55	-6	17.47	0.0	0.0	0.0	347.0				
07/10/2015	20:48:56	-5	17.47	0.0	0.0	0.0	347.0	Start Displacement			
07/10/2015	20:49:40	8	15.85	1.2	0.1	0.0	347.0				
07/10/2015	20:50:25	43	9.48	5.0	2.8	2.8	349.7				
07/10/2015	20:51:10	39	9.13	5.1	6.6	6.5	353.5				
07/10/2015	20:51:55	28	8.88	4.4	9.9	9.9	356.9				
07/10/2015	20:52:40	26	8.73	4.3	13.2	13.2	360.1				
07/10/2015	20:53:25	26	8.64	4.4	16.4	16.4	363.4				
07/10/2015	20:54:10	25	8.57	4.3	19.7	19.7	366.7				
07/10/2015	20:54:55	27	8.54	4.5	23.1	23.1	370.0				
07/10/2015	20:55:40	25	8.52	4.5	26.5	26.5	373.4				
07/10/2015	20:56:25	26	8.47	4.5	29.8	29.8	376.8				
07/10/2015	20:57:10	25	8.45	4.5	33.2	33.2	380.2				
07/10/2015	20:57:55	20	8.45	4.2	36.4	36.3	383.3				
07/10/2015	20:58:40	20	8.45	4.2	39.5	39.5	386.4				
07/10/2015	20:59:25	21	8.48	4.2	42.6	42.6	389.6				
07/10/2015	21:00:10	12	8.45	3.7	45.7	45.7	392.7				
07/10/2015	21:00:55	22	8.45	4.0	48.6	48.6	395.5				
07/10/2015	21:01:40	21	8.44	4.1	51.7	51.6	398.6				
07/10/2015	21:02:25	22	8.44	3.9	54.6	54.6	401.5				
07/10/2015	21:03:10	21	8.44	3.8	57.5	57.5	404.5				
07/10/2015	21:03:55	23	8.44	3.0	60.1	60.1	407.0				
07/10/2015	21:04:40	30	8.42	1.8	61.9	61.8	408.8				
07/10/2015	21:05:25	43	8.44	2.2	63.3	63.3	410.2				
07/10/2015	21:06:10	69	8.44	2.3	65.0	65.0	411.9				
07/10/2015	21:06:55	108	8.44	3.6	67.2	67.2	414.1				
07/10/2015	21:07:40	111	8.44	2.3	69.1	69.1	416.0				
07/10/2015	21:08:25	134	8.44	2.3	70.8	70.8	417.8				
07/10/2015	21:09:10	165	8.44	2.3	72.5	72.5	419.5				
07/10/2015	21:09:55	166	8.43	2.3	74.2	74.2	421.2				
07/10/2015	21:10:40	180	8.43	2.3	76.0	75.9	422.9				
07/10/2015	21:11:25	209	8.43	2.3	77.7	77.6	424.6				
07/10/2015	21:12:10	217	8.43	2.2	79.3	79.3	426.3				
07/10/2015	21:12:55	276	8.43	3.5	81.7	81.6	428.6				
07/10/2015	21:13:40	301	8.43	3.6	84.3	84.3	431.2				
07/10/2015	21:14:25	355	8.43	4.8	87.1	87.1	434.1				
07/10/2015	21:15:10	354	8.42	3.4	90.3	90.3	437.2				
07/10/2015	21:15:55	393	8.43	3.4	92.8	92.8	439.7				
07/10/2015	21:16:00	397	8.44	3.4	93.1	93.1	440.0	Cement to surface at 93bbl of displacement			
07/10/2015	21:16:40	435	8.44	3.4	95.3	95.3	442.3				
07/10/2015	21:17:25	443	8.44	3.4	97.9	97.8	444.8				
07/10/2015	21:18:10	455	8.44	3.4	100.4	100.4	447.3				
07/10/2015	21:18:55	481	8.44	3.4	102.9	102.9	449.9				
07/10/2015	21:19:40	503	8.44	3.4	105.5	105.4	452.4				

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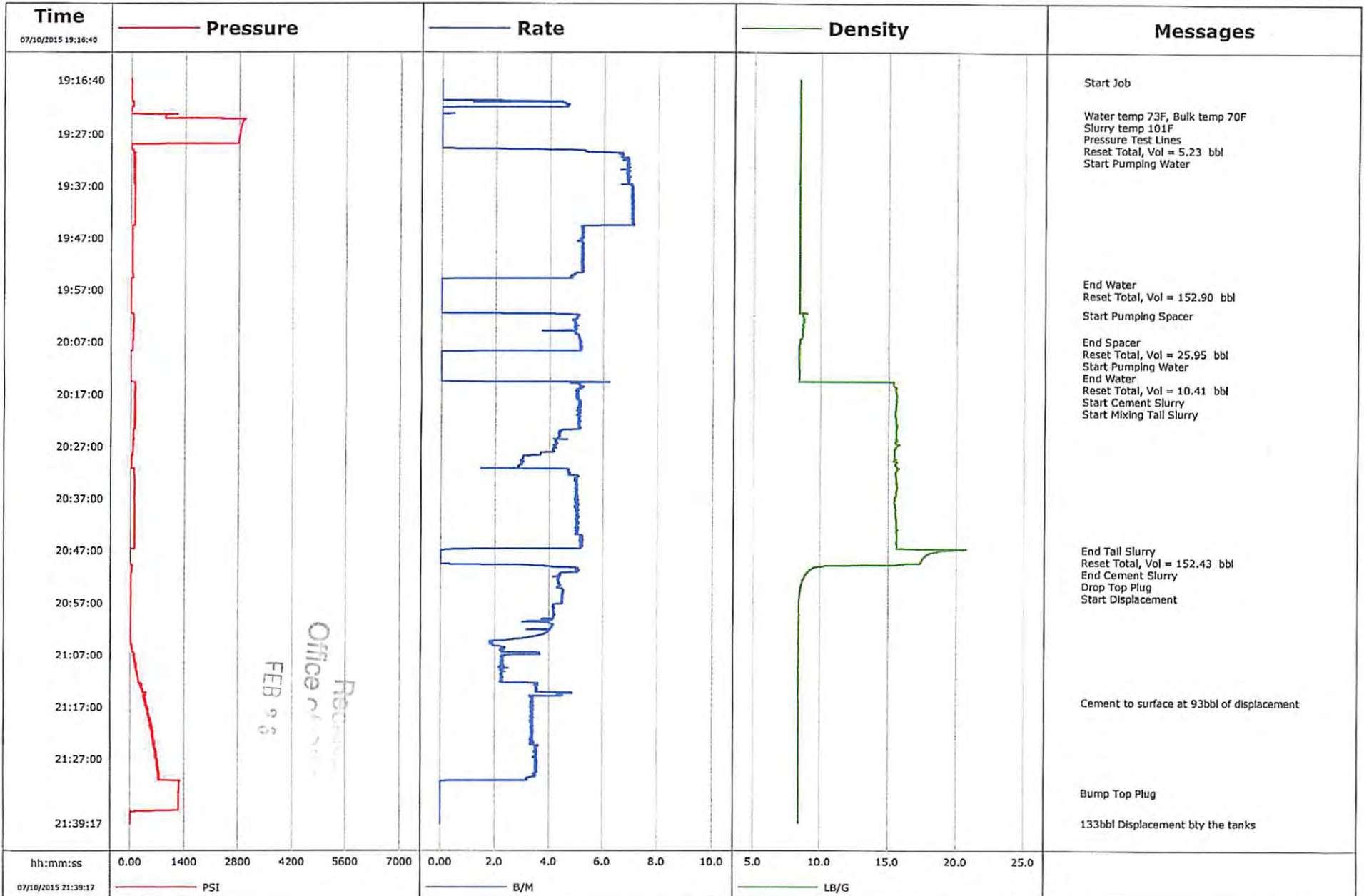
Well		Field			Job Start		Customer		Job Number	
MIP Unit 3H 3H		Undesignated			Jul/10/2015		Northeast Natural Energy LLC		DCHA-0053	
Date	Time 24-hr clock	CPF1_PRESS PSI	CPF1_DENS LB/G	CPF1_DOWNHOLE B/M	CPF1_TTL_STAGE BBL	CMT_DISP_VCCPF1_BBL	CPF1_TTL_VOLUME BBL	Message		
07/10/2015	21:21:10	536	8.44	3.4	110.5	110.5	457.5			
07/10/2015	21:21:55	591	8.44	3.4	113.0	113.0	460.0			
07/10/2015	21:22:40	581	8.44	3.4	115.6	115.6	462.5			
07/10/2015	21:23:25	588	8.44	3.4	118.1	118.1	465.0			
07/10/2015	21:24:10	610	8.43	3.3	120.6	120.6	467.6			
07/10/2015	21:24:55	617	8.44	3.5	123.2	123.2	470.2			
07/10/2015	21:25:40	642	8.44	3.6	125.9	125.9	472.8			
07/10/2015	21:26:25	643	8.44	3.5	128.5	128.5	475.5			
07/10/2015	21:27:10	666	8.44	3.5	131.1	131.1	478.1			
07/10/2015	21:27:55	682	8.44	3.6	133.8	133.8	480.7			
07/10/2015	21:28:40	688	8.44	3.5	136.4	136.4	483.4			
07/10/2015	21:29:25	719	8.44	3.5	139.1	139.1	486.0			
07/10/2015	21:30:10	739	8.44	3.5	141.7	141.7	488.7			
07/10/2015	21:30:55	746	8.44	3.2	144.2	144.2	491.2			
07/10/2015	21:31:40	1269	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:32:25	1268	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:33:10	1266	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:33:24	1265	8.44	0.0	145.2	145.1	492.1	Bump Top Plug		
07/10/2015	21:33:55	1263	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:34:40	1262	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:35:25	1260	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:36:10	1258	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:36:55	903	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:37:40	2	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:38:25	2	8.44	0.0	145.2	145.1	492.1			
07/10/2015	21:39:10	3	8.44	0.0	0.0	145.1	492.1			

Post Job Summary

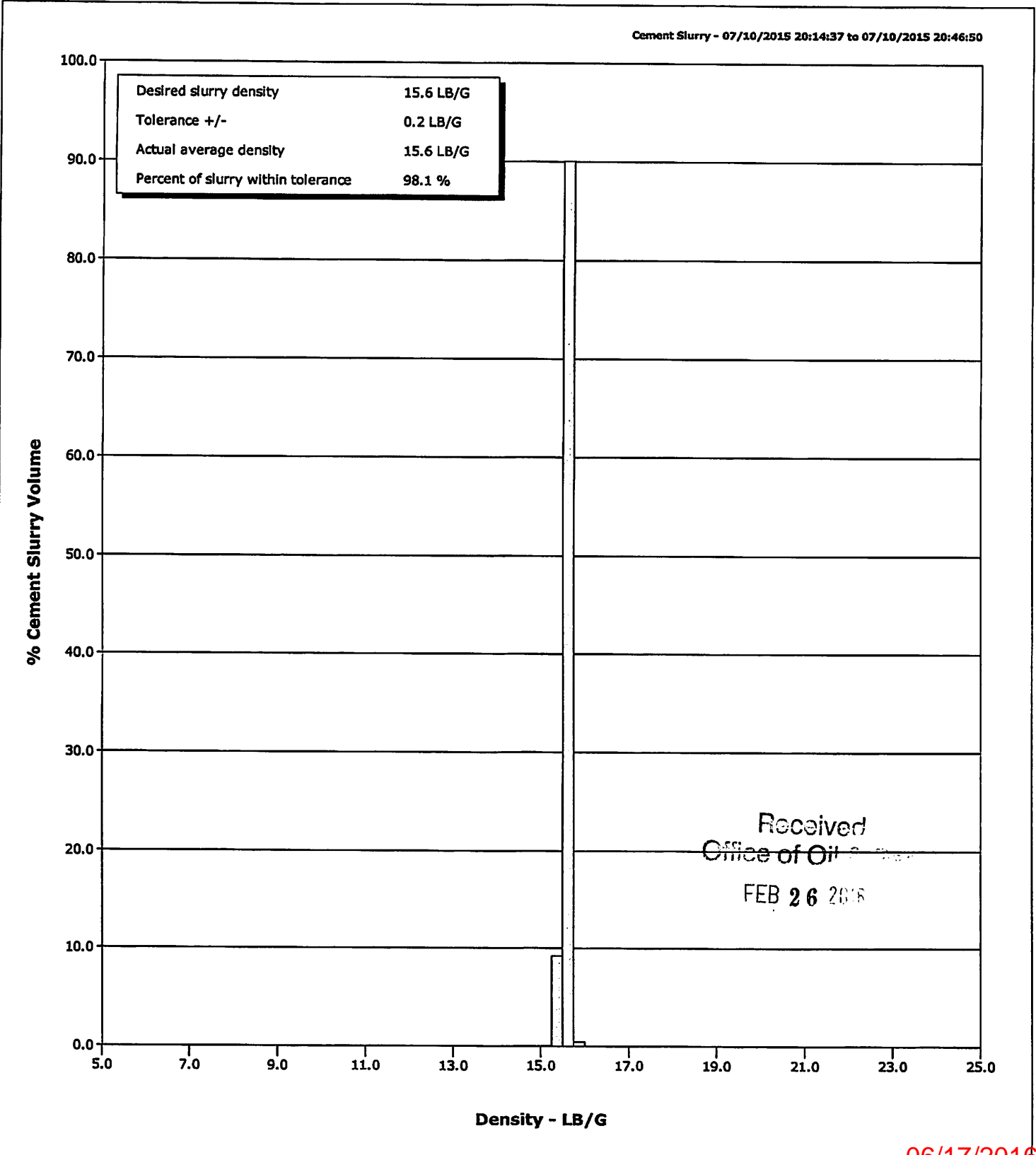
Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.5			7.8	492.1	0.0	183.9	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2955	2	287	1275		FreshWater	bbl	8.34 lb/gal
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume	40.0 bbl
%	140.0 bbl	145.1 bbl	73 degF	Washed Thru Perfs	<input type="checkbox"/>	To	ft
Customer or Authorized Representative	Schlumberger Supervisor			Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
Jim Cover	Joshua Richards			-		-	

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Well	MIP Unit 3H	Client	Northeast Natural Energy LLC
Field	Undesignated	SIR No.	DCHA-0053
Engineer	Joshua Richards	Job Type	9 5/8" Intermediate
Country	United States	Job Date	07-10-2015



Well	MIP Unit 3H	Client	Northeast Natural Energy LLC
Field	Undesignated	SIR No.	DCHA-0053
Engineer	Joshua Richards	Job Type	9 5/8" Intermediate
Country	United States	Job Date	07-10-2015





Cementing Service Report

Customer				Job Number				
NORTHEAST NATURAL ENERGY LLC				DCHA-00109				
Well		Location (legal)		Schlumberger Location		Job Start		
MIP UNIT 3H 3H		Weston, WV		Weston, WV		Sep/06/2015		
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD	
UNDESIGNAT				deg	8.8 in	7840.0 ft	ft	
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient	
Monongalia		West Virginia		5540 psi	129 degF	114 degF	lb/gal	
Well Master		API/UWI						
0631643025		4706101707H000						
Rig Name	Drilled For	Service Via	Casing/Liner					
Patterson 254	Gas	Land	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Offshore Zone	Well Class	Well Type	1800.0	9.6	40.0			
	New	Development	0.0	0.0	0.0			
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
		lb/gal	cP	T/D	Depth, ft	Size, in	Weight, lb/ft	
Service Line		Job Type		D	7840.0	5.0	19.5	
Cementing		Kick Plug		0.0	0.0	0.0		
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection		Perforations/Open Hole				
psi	psi	4 1/2" IF DP pin		Top, ft	Bottom, ft	shot/ft	No. of Shots	
				ft	ft		Total Interval	
				ft	ft		ft	
				ft	ft		Diameter	
				ft	ft		in	
Service Instructions		Treat Down	Displacement	Packer Type	Packer Depth			
Provide equipment and materials to set 3 plugs from 7840 ft to 6080 ft in 8.75 in OH with 10% excess.		Casing	bbl		ft			
		Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.			
		bbl	bbl	bbl	bbl			
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job		
Lift Pressure		Shoe Type		Squeeze Type				
psi								
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth		Tool Type		
				ft				
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type		Tool Depth		
						ft		
Cement Head Type		Stage Tool Depth		Tail Pipe Size				
		ft		in				
Job Scheduled For		Arrived on Location	Leave Location	Collar Type		Tail Pipe Depth		
Sep/06/2015 06:00		Sep/06/2015 06:00	Sep/06/2015 19:00			ft		
				Collar Depth		Sqz. Total Vol.		
				ft		bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message
09/06/2015	08:13:41	3	0.0	8.27	20.0	0.0	20.0	Started Acquisition
09/06/2015	08:14:26	4	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:15:11	4	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:15:56	3	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:16:41	4	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:17:26	4	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:18:11	3	0.0	8.26	20.0	0.0	20.0	
09/06/2015	08:18:56	4	0.0	8.27	20.0	0.0	20.0	
09/06/2015	08:19:41	29	0.3	8.29	0.3	0.0	0.3	
09/06/2015	08:20:26	355	4.3	8.26	2.8	0.0	2.8	
09/06/2015	08:21:11	4	0.6	8.55	5.2	0.0	5.2	
09/06/2015	08:21:56	-0	0.6	8.50	5.6	0.0	5.6	
09/06/2015	08:22:41	1261	0.0	8.27	5.8	0.0	5.8	
09/06/2015	08:23:26	2238	0.0	8.27	5.8	0.0	5.8	
09/06/2015	08:24:11	2213	0.0	8.27	5.8	0.0	5.8	
09/06/2015	08:24:56	2200	0.0	8.27	5.8	0.0	5.8	
09/06/2015	08:25:41	2160	0.0	8.27	5.8	0.0	5.8	Pressure Test Lines
09/06/2015	08:25:45	2150	0.0	8.27	5.8	0.0	5.8	Reset Total, Vol = 6.04 bbl
09/06/2015	08:26:26	9	0.0	8.27	5.8	0.0	5.8	
09/06/2015	08:27:04	8	0.0	8.27	0.0	0.0	5.8	Start Pumping Spacer
09/06/2015	08:27:11	9	0.0	8.27	0.0	0.0	5.8	

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	08:28:41	9	0.0	8.28	0.0	0.0	5.8				
09/06/2015	08:29:26	9	0.0	8.28	0.0	0.0	5.8				
09/06/2015	08:30:11	10	0.0	8.28	0.0	0.0	5.8				
09/06/2015	08:30:56	10	0.0	8.28	0.0	0.0	5.8				
09/06/2015	08:31:41	11	0.0	8.28	0.0	0.0	5.8				
09/06/2015	08:32:26	11	0.0	8.29	0.0	0.0	5.8				
09/06/2015	08:33:11	11	0.0	8.29	0.0	0.0	5.8				
09/06/2015	08:33:56	12	0.0	8.30	0.0	0.0	5.8				
09/06/2015	08:34:41	12	0.0	8.31	0.0	0.0	5.8				
09/06/2015	08:35:26	414	4.7	13.54	1.2	0.0	7.0				
09/06/2015	08:36:11	352	4.7	13.58	4.7	0.0	10.5				
09/06/2015	08:36:56	358	4.7	13.63	8.2	0.0	14.0				
09/06/2015	08:37:41	361	4.7	13.70	11.7	0.0	17.5				
09/06/2015	08:38:26	351	4.7	13.78	15.2	0.0	21.1				
09/06/2015	08:39:11	342	4.7	13.81	18.7	0.0	24.5				
09/06/2015	08:39:56	319	4.7	13.82	22.3	0.0	28.1				
09/06/2015	08:40:41	301	4.7	14.08	25.8	0.0	31.6				
09/06/2015	08:41:26	72	4.4	14.10	29.3	0.0	35.1				
09/06/2015	08:41:59	-43	0.0	14.33	29.7	0.0	35.5	End Spacer			
09/06/2015	08:42:00	-43	0.0	14.33	29.7	0.0	35.5	Reset Total, Vol = 29.71 bbl			
09/06/2015	08:42:11	-43	0.0	14.33	29.7	0.0	35.5				
09/06/2015	08:42:56	-43	0.0	14.32	29.7	0.0	35.5				
09/06/2015	08:43:41	-42	0.0	14.31	0.0	0.0	35.5				
09/06/2015	08:44:26	-43	0.0	14.30	0.0	0.0	35.5				
09/06/2015	08:45:11	-42	0.0	14.30	0.0	0.0	35.5				
09/06/2015	08:45:56	-42	0.0	14.28	0.0	0.0	35.5				
09/06/2015	08:46:41	-41	0.0	14.28	0.0	0.0	35.5				
09/06/2015	08:47:26	-42	0.0	14.27	0.0	0.0	35.5				
09/06/2015	08:48:11	-41	0.0	14.26	0.0	0.0	35.5				
09/06/2015	08:48:56	-23	0.0	14.12	0.0	0.0	35.5				
09/06/2015	08:49:06	613	4.3	16.93	0.3	0.0	35.8	Start Cement Slurry			
09/06/2015	08:49:07	752	4.5	16.95	0.4	0.0	35.9	Start Mixing Tail Slurry			
09/06/2015	08:49:41	435	4.7	16.96	3.0	0.0	38.5				
09/06/2015	08:50:26	437	4.7	17.14	6.5	0.0	42.0				
09/06/2015	08:51:11	432	4.7	17.24	10.0	0.0	45.5				
09/06/2015	08:51:56	399	4.7	17.29	13.5	0.0	49.0				
09/06/2015	08:52:41	359	4.6	17.32	17.0	0.0	52.5				
09/06/2015	08:53:26	319	4.7	17.31	20.5	0.0	56.0				
09/06/2015	08:54:11	292	4.7	17.29	24.0	0.0	59.5				
09/06/2015	08:54:56	284	4.7	17.34	27.5	0.0	63.1				
09/06/2015	08:55:41	272	4.7	17.35	31.0	0.0	66.6				
09/06/2015	08:56:19	278	4.7	17.35	34.0	0.0	69.5	Mud scaled @ 17.5ppg			
09/06/2015	08:56:26	272	4.7	17.35	34.6	0.0	70.1				
09/06/2015	08:57:11	271	4.7	17.34	38.1	0.0	73.6				
09/06/2015	08:57:56	281	4.7	17.35	41.6	0.0	77.1				
09/06/2015	08:58:41	269	4.7	17.34	45.1	0.0	80.6				
09/06/2015	08:59:26	249	4.7	17.35	48.6	0.0	84.1				
09/06/2015	09:00:11	143	3.5	17.38	51.3	0.0	86.9				
09/06/2015	09:00:41	4	2.7	17.38	53.1	0.0	88.6	End Tail Slurry			
09/06/2015	09:00:43	-28	1.9	17.39	53.2	0.0	88.7	Reset Total, Vol = 53.22 bbl			
09/06/2015	09:00:44	-28	1.2	17.64	53.2	0.0	88.7	End Cement Slurry			
09/06/2015	09:00:46	-29	0.3	18.31	53.3	0.0	88.8	Start Pumping Spacer			
09/06/2015	09:00:56	-28	0.0	18.01	53.3	0.0	88.8				
09/06/2015	09:01:41	-30	0.0	17.71	53.3	0.0	88.8				

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	09:03:11	-32	0.0	17.66	53.3	0.0	88.8				
09/06/2015	09:03:56	-32	0.0	17.67	0.0	0.0	88.8				
09/06/2015	09:04:41	268	4.1	14.77	0.2	0.0	89.0				
09/06/2015	09:05:26	112	4.8	14.60	3.8	0.0	92.6				
09/06/2015	09:06:11	24	3.7	14.37	7.3	0.0	96.1				
09/06/2015	09:06:56	-12	4.3	14.36	10.7	0.0	99.5				
09/06/2015	09:07:41	-41	0.0	14.50	11.1	0.0	99.9				
09/06/2015	09:08:26	-32	0.0	14.42	0.0	0.0	99.9				
09/06/2015	09:09:11	-33	0.0	14.42	0.0	0.0	99.9				
09/06/2015	09:09:56	-32	0.0	14.41	0.0	0.0	99.9				
09/06/2015	09:10:41	-32	0.0	14.41	0.0	0.0	99.9				
09/06/2015	09:11:26	-32	0.0	14.41	0.0	0.0	99.9				
09/06/2015	09:12:11	-33	0.0	14.40	0.0	0.0	99.9				
09/06/2015	09:12:56	-32	0.0	14.40	0.0	0.0	99.9				
09/06/2015	09:13:41	-32	0.0	14.40	0.0	0.0	99.9				
09/06/2015	09:13:59	-32	0.0	14.40	0.0	0.0	99.9	End Spacer			
09/06/2015	09:14:01	-32	0.0	14.40	0.0	0.0	99.9	Reset Total, Vol = 11.12 bbl			
09/06/2015	09:14:12	-31	0.0	14.40	0.0	0.0	99.9	Drop Bottom Plug			
09/06/2015	09:14:15	-32	0.0	14.40	0.0	0.0	99.9	Start Displacement			
09/06/2015	09:14:26	-32	0.0	14.40	0.0	0.0	99.9				
09/06/2015	09:15:11	76	4.8	12.36	2.3	2.3	102.2				
09/06/2015	09:15:56	82	4.8	12.29	5.9	5.9	105.8				
09/06/2015	09:16:41	47	4.0	11.74	8.9	8.9	108.7				
09/06/2015	09:17:26	52	3.9	12.51	11.9	11.9	111.7				
09/06/2015	09:18:11	88	4.8	12.45	14.9	14.9	114.7				
09/06/2015	09:18:56	71	4.8	11.73	18.4	18.4	118.3				
09/06/2015	09:19:41	91	4.8	12.58	22.0	22.0	121.9				
09/06/2015	09:20:26	87	4.8	12.56	25.6	25.6	125.5				
09/06/2015	09:21:11	81	4.7	12.35	29.2	29.2	129.0				
09/06/2015	09:21:56	90	4.8	12.58	32.7	32.7	132.6				
09/06/2015	09:22:41	84	4.8	12.54	36.3	36.3	136.2				
09/06/2015	09:23:26	78	4.8	12.18	39.9	39.9	139.8				
09/06/2015	09:24:11	90	4.8	12.62	43.5	43.5	143.4				
09/06/2015	09:24:56	89	4.7	12.62	47.1	47.1	146.9				
09/06/2015	09:25:41	42	3.7	12.60	50.2	50.2	150.0				
09/06/2015	09:26:26	44	3.7	12.62	52.9	52.9	152.8				
09/06/2015	09:27:11	43	3.7	12.61	55.7	55.7	155.6				
09/06/2015	09:27:56	42	3.8	12.59	58.5	58.5	158.4				
09/06/2015	09:28:41	43	3.8	12.52	61.3	61.3	161.2				
09/06/2015	09:29:26	44	3.8	12.64	64.2	64.2	164.0				
09/06/2015	09:30:11	43	3.7	12.64	67.0	67.0	166.9				
09/06/2015	09:30:56	45	3.8	12.64	69.8	69.8	169.7				
09/06/2015	09:31:41	44	3.8	12.64	72.7	72.7	172.5				
09/06/2015	09:32:26	43	3.8	12.63	75.5	75.5	175.4				
09/06/2015	09:33:11	43	3.8	12.62	78.3	78.3	178.2				
09/06/2015	09:33:56	45	3.8	12.63	81.2	81.2	181.0				
09/06/2015	09:34:41	45	3.8	12.65	84.0	84.0	183.9				
09/06/2015	09:35:26	45	3.7	12.64	86.8	86.8	186.7				
09/06/2015	09:36:11	47	3.1	12.64	89.6	89.6	189.5				
09/06/2015	09:36:56	50	2.8	12.65	91.9	91.9	191.7				
09/06/2015	09:37:41	51	2.5	12.64	93.8	93.8	193.7				
09/06/2015	09:38:26	63	2.3	12.64	95.6	95.6	195.5				
09/06/2015	09:39:11	93	2.3	12.64	97.3	97.3	197.2				
09/06/2015	09:39:56	113	2.4	12.64	99.1	99.1	199.0				

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	09:41:26	155	2.3	12.65	102.6	102.6	202.5				
09/06/2015	09:42:11	182	2.3	12.65	104.4	104.4	204.2				
09/06/2015	09:42:56	206	2.3	12.65	106.1	106.1	206.0				
09/06/2015	09:43:41	237	2.3	12.64	107.9	107.9	207.8				
09/06/2015	09:44:26	270	2.3	12.64	109.6	109.6	209.5				
09/06/2015	09:45:11	291	2.3	12.64	111.4	111.4	211.2				
09/06/2015	09:45:56	301	2.3	12.65	113.1	113.1	213.0				
09/06/2015	09:46:01	277	2.3	12.65	113.3	113.3	213.2	End Displacement			
09/06/2015	09:46:15	-27	0.0	12.66	113.6	113.6	213.4	Reset Total, Vol = 113.57 bbl			
09/06/2015	09:46:22	-26	0.0	12.66	113.6	0.0	213.4	End Plug 1			
09/06/2015	09:46:41	-23	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:47:26	-40	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:48:11	-38	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:48:56	-45	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:49:41	-46	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:50:26	-45	0.0	12.66	113.6	0.0	213.4				
09/06/2015	09:51:11	65	4.3	9.18	115.0	1.4	214.9				
09/06/2015	09:51:56	60	4.3	9.22	118.2	4.7	218.1				
09/06/2015	09:52:41	60	4.3	9.33	121.4	7.9	221.3				
09/06/2015	09:53:26	58	4.3	9.40	124.6	11.1	224.5				
09/06/2015	09:54:11	64	4.3	9.23	127.8	14.3	227.7				
09/06/2015	09:54:56	58	4.2	8.92	131.1	17.5	231.0				
09/06/2015	09:55:41	58	4.5	8.95	2.2	20.8	234.2				
09/06/2015	09:56:26	25	4.6	7.02	4.5	23.0	236.5				
09/06/2015	09:57:11	-50	0.2	4.75	7.4	26.0	239.4				
09/06/2015	09:57:56	-49	2.3	3.39	11.0	29.6	243.0				
09/06/2015	09:58:41	-66	1.2	4.20	11.4	30.0	243.5				
09/06/2015	09:59:26	-67	0.0	1.64	12.1	30.7	244.1				
09/06/2015	10:00:11	-66	0.0	3.19	14.5	33.1	246.5				
09/06/2015	10:00:56	-49	2.7	3.77	16.7	35.3	248.7				
09/06/2015	10:01:41	-61	0.0	2.22	17.1	35.7	249.2				
09/06/2015	10:02:26	-64	0.0	0.07	17.3	35.9	249.3				
09/06/2015	10:03:11	-51	0.0	0.06	17.3	35.9	249.3				
09/06/2015	10:03:56	30	4.2	8.04	19.8	38.5	251.9				
09/06/2015	10:04:41	-59	0.0	8.29	22.0	40.6	254.0				
09/06/2015	10:05:26	33	4.3	7.94	23.7	42.3	255.7				
09/06/2015	10:06:11	-55	0.0	8.23	24.5	43.1	256.6				
09/06/2015	10:06:56	-68	0.0	8.20	25.1	43.7	257.1				
09/06/2015	10:07:41	101	5.5	8.26	27.6	46.2	259.7				
09/06/2015	10:08:26	15	4.4	10.76	29.8	48.4	261.9				
09/06/2015	10:09:11	262	5.7	12.65	34.1	52.7	266.1				
09/06/2015	10:09:56	221	5.8	12.63	38.4	57.0	270.4				
09/06/2015	10:10:41	196	5.8	11.79	42.7	61.3	274.7				
09/06/2015	10:11:26	-32	0.5	10.24	45.0	63.6	277.0				
09/06/2015	10:12:11	-15	2.5	8.75	45.8	64.4	277.8				
09/06/2015	10:12:56	-41	2.1	7.41	47.7	66.3	279.8				
09/06/2015	10:13:41	-3	0.6	8.14	48.3	66.9	280.3				
09/06/2015	10:14:26	16	5.2	6.48	49.8	68.4	281.8				
09/06/2015	10:15:11	105	5.7	8.15	53.8	72.4	285.8				
09/06/2015	10:15:56	-47	0.0	8.26	0.1	73.2	286.6				
09/06/2015	10:59:26	-46	0.0	8.26	0.1	0.0	286.6				
09/06/2015	11:11:12	7	0.0	8.26	0.0	0.0	0.0	Started Acquisition			
09/06/2015	11:11:16	6	0.0	8.25	0.0	0.0	0.0	Start Pumping Spacer			
09/06/2015	11:11:26	7	0.0	8.26	0.0	0.0	0.0				

Received
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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	11:12:56	7	0.0	8.26	0.0	0.0	0.0				
09/06/2015	11:13:41	7	0.0	8.25	0.0	0.0	0.0				
09/06/2015	11:14:26	7	0.0	8.25	0.0	0.0	0.0				
09/06/2015	11:15:11	8	0.0	8.25	0.0	0.0	0.0				
09/06/2015	11:15:56	8	0.0	8.25	0.0	0.0	0.0				
09/06/2015	11:16:41	489	4.7	13.52	2.0	0.0	2.0				
09/06/2015	11:17:26	463	4.7	13.62	5.5	0.0	5.5				
09/06/2015	11:18:11	448	4.7	13.70	9.0	0.0	9.0				
09/06/2015	11:18:56	442	4.7	13.73	12.5	0.0	12.5				
09/06/2015	11:19:41	409	4.7	13.82	16.0	0.0	16.0				
09/06/2015	11:20:26	389	4.7	13.81	19.5	0.0	19.5				
09/06/2015	11:21:11	377	4.7	13.81	23.1	0.0	23.1				
09/06/2015	11:21:56	355	4.7	14.19	26.6	0.0	26.6				
09/06/2015	11:22:41	5	0.0	14.76	29.6	0.0	29.6				
09/06/2015	11:22:44	5	0.0	14.76	0.0	0.0	29.6	End Spacer			
09/06/2015	11:22:45	5	0.0	14.76	0.0	0.0	29.6	Reset Total, Vol = 29.57 bbl			
09/06/2015	11:23:26	7	0.0	14.79	0.0	0.0	29.6				
09/06/2015	11:24:11	7	0.0	14.81	0.0	0.0	29.6				
09/06/2015	11:24:56	7	0.0	14.82	0.0	0.0	29.6				
09/06/2015	11:25:41	7	0.0	14.81	0.0	0.0	29.6				
09/06/2015	11:26:26	8	0.0	14.80	0.0	0.0	29.6				
09/06/2015	11:27:11	8	0.0	14.79	0.0	0.0	29.6				
09/06/2015	11:27:56	7	0.0	14.78	0.0	0.0	29.6				
09/06/2015	11:28:41	7	0.0	14.77	0.0	0.0	29.6				
09/06/2015	11:29:26	7	0.0	14.77	0.0	0.0	29.6				
09/06/2015	11:30:11	553	4.7	16.63	1.0	0.0	30.6				
09/06/2015	11:30:56	457	4.7	16.86	4.5	0.0	34.1				
09/06/2015	11:31:41	414	4.7	17.00	8.0	0.0	37.6				
09/06/2015	11:32:26	367	4.7	17.11	11.5	0.0	41.1				
09/06/2015	11:33:11	338	4.7	17.17	15.0	0.0	44.6				
09/06/2015	11:33:56	182	3.4	17.19	18.3	0.0	47.9				
09/06/2015	11:34:41	110	2.6	17.17	20.8	0.0	50.4				
09/06/2015	11:35:26	106	2.6	17.10	22.7	0.0	52.3				
09/06/2015	11:36:11	9	0.0	17.15	23.2	0.0	52.8				
09/06/2015	11:36:56	9	0.0	17.14	23.2	0.0	52.8				
09/06/2015	11:37:41	9	0.0	17.14	23.2	0.0	52.8				
09/06/2015	11:38:26	9	0.0	17.14	23.2	0.0	52.8				
09/06/2015	11:39:11	9	0.0	17.14	23.2	0.0	52.8				
09/06/2015	11:39:56	9	0.0	17.15	23.2	0.0	52.8				
09/06/2015	11:40:41	9	0.0	17.15	23.2	0.0	52.8				
09/06/2015	11:41:26	9	0.0	17.15	23.2	0.0	52.8				
09/06/2015	11:42:11	9	0.0	17.16	23.2	0.0	52.8				
09/06/2015	11:42:47	9	0.0	17.16	23.2	0.0	52.8	Start Cement Slurry			
09/06/2015	11:42:48	9	0.0	17.16	23.2	0.0	52.8	Start Mixing Tail Slurry			
09/06/2015	11:42:56	9	0.0	17.16	23.2	0.0	52.8				
09/06/2015	11:43:41	9	0.0	17.16	23.2	0.0	52.8	Office			
09/06/2015	11:44:26	9	0.0	17.16	23.2	0.0	52.8	FE 23			
09/06/2015	11:45:11	272	4.7	17.20	25.3	0.0	54.9				
09/06/2015	11:45:56	278	4.7	17.26	28.9	0.0	58.4				
09/06/2015	11:46:41	308	4.7	17.34	32.4	0.0	61.9				
09/06/2015	11:47:26	304	4.7	17.31	35.9	0.0	65.5				
09/06/2015	11:48:11	305	4.7	17.32	39.4	0.0	69.0				
09/06/2015	11:48:56	311	4.7	17.32	42.9	0.0	72.5				
09/06/2015	11:49:41	298	4.7	17.32	46.4	0.0	76.0				

Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	11:51:04	12	2.3	17.51	52.9	0.0	82.4	End Tail Slurry			
09/06/2015	11:51:05	12	1.4	17.60	52.9	0.0	82.5	Reset Total, Vol = 52.95 bbl			
09/06/2015	11:51:07	11	0.4	17.74	0.0	0.0	82.5	Start Pumping Spacer			
09/06/2015	11:51:11	11	0.0	17.78	0.0	0.0	82.6				
09/06/2015	11:51:56	10	0.0	17.64	0.0	0.0	82.6				
09/06/2015	11:52:41	10	0.0	17.67	0.0	0.0	82.6				
09/06/2015	11:53:26	10	0.0	17.69	0.0	0.0	82.6				
09/06/2015	11:54:11	11	0.0	17.71	0.0	0.0	82.6				
09/06/2015	11:54:56	104	0.0	17.73	0.0	0.0	82.6				
09/06/2015	11:55:41	117	4.1	14.50	3.2	0.0	85.7				
09/06/2015	11:56:26	108	3.9	14.27	6.2	0.0	88.7				
09/06/2015	11:57:11	116	4.4	14.30	9.2	0.0	91.7				
09/06/2015	11:57:56	5	0.0	14.66	10.7	0.0	93.2				
09/06/2015	11:58:41	17	0.0	14.68	10.7	0.0	93.2				
09/06/2015	11:59:26	16	0.0	14.70	10.7	0.0	93.2				
09/06/2015	11:59:36	17	0.0	14.70	10.7	0.0	93.2	Reset Total, Vol = 10.68 bbl			
09/06/2015	11:59:38	16	0.0	14.70	10.7	0.0	93.2	End Spacer			
09/06/2015	11:59:45	17	0.0	14.70	10.7	0.0	93.2	Start Displacement			
09/06/2015	12:00:11	16	0.0	14.70	10.7	0.0	93.2				
09/06/2015	12:00:56	16	0.0	14.69	0.0	0.0	93.2				
09/06/2015	12:01:41	16	0.0	14.68	0.0	0.0	93.2				
09/06/2015	12:02:26	16	0.0	14.67	0.0	0.0	93.2				
09/06/2015	12:03:11	16	0.0	14.67	0.0	0.0	93.2				
09/06/2015	12:03:56	15	0.0	14.66	0.0	0.0	93.2				
09/06/2015	12:04:41	16	0.0	14.65	0.0	0.0	93.2				
09/06/2015	12:05:26	16	0.0	14.64	0.0	0.0	93.2				
09/06/2015	12:06:11	15	0.0	14.63	0.0	0.0	93.2				
09/06/2015	12:06:56	15	0.0	14.62	0.0	0.0	93.2				
09/06/2015	12:07:41	15	0.0	14.61	0.0	0.0	93.2				
09/06/2015	12:08:26	32	1.4	13.00	0.1	0.1	93.3				
09/06/2015	12:09:11	133	4.8	12.48	3.0	3.0	96.2				
09/06/2015	12:09:56	126	4.8	12.29	6.1	6.1	99.3				
09/06/2015	12:10:41	106	4.9	12.08	9.7	9.7	102.9				
09/06/2015	12:11:26	136	4.8	12.59	13.3	13.3	106.5				
09/06/2015	12:12:11	130	4.6	12.59	16.9	16.9	110.1				
09/06/2015	12:12:56	127	4.6	12.56	20.3	20.3	113.5				
09/06/2015	12:13:41	116	4.4	12.56	23.8	23.8	117.0				
09/06/2015	12:14:26	108	4.4	12.47	27.1	27.1	120.3				
09/06/2015	12:15:11	95	4.2	11.83	30.2	30.2	123.4				
09/06/2015	12:15:56	107	4.1	12.59	33.4	33.4	126.5				
09/06/2015	12:16:41	106	4.1	12.60	36.5	36.5	129.6				
09/06/2015	12:17:26	108	4.1	12.59	39.5	39.5	132.7				
09/06/2015	12:18:11	107	4.1	12.58	42.6	42.6	135.8				
09/06/2015	12:18:56	103	4.1	12.58	45.7	45.7	138.9				
09/06/2015	12:19:41	106	4.1	12.55	48.8	48.8	142.0				
09/06/2015	12:20:26	110	4.1	12.59	51.9	51.9	145.1				
09/06/2015	12:21:11	108	4.1	12.60	55.0	55.0	148.2				
09/06/2015	12:21:56	110	4.1	12.60	58.1	58.1	151.3				
09/06/2015	12:22:41	106	4.1	12.60	61.2	61.2	154.4				
09/06/2015	12:23:26	107	4.1	12.59	64.3	64.3	157.5				
09/06/2015	12:24:11	106	4.1	12.59	67.4	67.4	160.6				
09/06/2015	12:24:56	107	4.1	12.58	70.5	70.5	163.7				
09/06/2015	12:25:41	107	4.1	12.60	73.6	73.6	166.8				
09/06/2015	12:26:26	110	4.1	12.60	76.7	76.7	169.9				

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	12:27:56	172	4.0	12.60	82.9	82.9	176.1				
09/06/2015	12:28:41	162	3.4	12.60	85.6	85.6	178.8				
09/06/2015	12:29:26	208	3.4	12.59	88.2	88.2	181.4				
09/06/2015	12:30:11	251	3.4	12.59	90.7	90.7	183.9				
09/06/2015	12:30:56	288	3.4	12.60	93.3	93.3	186.5				
09/06/2015	12:31:41	324	3.4	12.60	95.9	95.9	189.1				
09/06/2015	12:32:26	365	3.4	12.60	98.4	98.4	191.6				
09/06/2015	12:33:11	407	3.4	12.60	101.0	101.0	194.2				
09/06/2015	12:33:56	20	0.0	12.75	101.8	101.8	195.0				
09/06/2015	12:34:19	5	0.0	12.76	101.8	101.8	195.0	Reset Total, Vol = 103 bbl			
09/06/2015	12:34:22	5	0.0	12.76	101.8	101.8	195.0	End Displacement			
09/06/2015	12:34:41	19	0.0	12.76	101.8	101.8	195.0				
09/06/2015	12:34:54	10	0.0	12.76	101.8	101.8	195.0	End Plug 2			
09/06/2015	12:35:26	7	0.0	12.77	101.8	101.8	195.0				
09/06/2015	12:36:11	7	0.0	12.77	101.8	101.8	195.0				
09/06/2015	12:36:56	2	0.0	12.74	101.8	101.8	195.0				
09/06/2015	12:37:41	1	0.0	12.64	101.8	101.8	195.0				
09/06/2015	12:38:26	88	3.8	11.81	0.6	101.8	195.6				
09/06/2015	12:39:11	24	1.6	12.15	3.0	101.8	198.0				
09/06/2015	12:39:56	17	1.2	10.26	3.8	101.8	198.8				
09/06/2015	12:40:41	43	2.5	9.07	5.2	101.8	200.2				
09/06/2015	12:41:26	-4	3.7	5.66	6.6	101.8	201.7				
09/06/2015	12:42:11	11	1.8	7.85	8.7	101.8	203.7				
09/06/2015	12:42:56	62	3.4	9.31	9.9	101.8	204.9				
09/06/2015	12:43:41	94	4.3	9.35	13.1	101.8	208.1				
09/06/2015	12:44:26	90	4.2	9.45	16.3	101.8	211.3				
09/06/2015	13:41:39	-0	0.0	8.26	58.2	101.8	253.2	Plug 3 Start			
09/06/2015	13:42:11	-0	0.0	8.26	58.2	101.8	253.2				
09/06/2015	13:42:43	-0	0.0	8.26	58.2	101.8	253.2	Reset Total, Vol = 17.87 bbl			
09/06/2015	13:42:56	1	0.0	8.26	58.2	0.0	253.2				
09/06/2015	13:43:27	0	0.0	8.26	58.2	0.0	253.2	Start Pumping Spacer			
09/06/2015	13:43:41	-0	0.0	8.26	58.2	0.0	253.2				
09/06/2015	13:44:26	-0	0.0	8.26	58.2	0.0	253.2				
09/06/2015	13:45:11	-0	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:45:56	0	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:46:41	1	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:47:26	1	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:48:11	1	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:48:56	86	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:49:41	90	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:50:26	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:51:11	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:51:56	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:52:41	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:53:26	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:54:11	92	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:54:56	91	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:55:41	90	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:56:26	90	0.0	8.26	0.0	0.0	0.0				
09/06/2015	13:57:11	431	4.7	13.81	1.4	0.0	1.4				
09/06/2015	13:57:56	421	4.7	13.86	4.9	0.0	4.9				
09/06/2015	13:58:41	410	4.7	13.86	8.5	0.0	8.5				
09/06/2015	13:59:26	382	4.7	13.89	12.0	0.0	12.0				
09/06/2015	14:00:11	358	4.7	13.94	15.5	0.0	15.5				

Recalculated
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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	14:01:41	308	4.7	13.99	22.5	0.0	22.5				
09/06/2015	14:02:26	290	4.7	14.25	26.1	0.0	26.1				
09/06/2015	14:03:11	-1	1.6	14.63	29.5	0.0	29.5	End Spacer			
09/06/2015	14:03:13	-1	0.5	15.22	29.6	0.0	29.6	Reset Total, Vol = 29.60 bbl			
09/06/2015	14:03:56	2	0.0	14.83	0.0	0.0	29.6				
09/06/2015	14:04:41	3	0.0	14.86	0.0	0.0	29.6				
09/06/2015	14:05:26	3	0.0	14.90	0.0	0.0	29.6				
09/06/2015	14:06:11	4	0.0	14.93	0.0	0.0	29.6				
09/06/2015	14:06:56	4	0.0	14.94	0.0	0.0	29.6				
09/06/2015	14:07:14	4	0.0	14.95	0.0	0.0	29.6	Start Cement Slurry			
09/06/2015	14:07:15	4	0.0	14.95	0.0	0.0	29.6	Start Mixing Tail Slurry			
09/06/2015	14:07:41	276	4.7	16.87	0.7	0.0	30.3				
09/06/2015	14:08:26	387	4.7	17.01	4.2	0.0	33.8				
09/06/2015	14:09:11	346	4.7	17.14	7.7	0.0	37.3				
09/06/2015	14:09:56	309	4.7	17.21	11.2	0.0	40.8				
09/06/2015	14:10:41	326	4.7	17.26	14.7	0.0	44.3				
09/06/2015	14:11:26	320	4.7	17.28	18.2	0.0	47.8				
09/06/2015	14:12:11	328	4.7	17.29	21.7	0.0	51.3				
09/06/2015	14:12:56	327	4.7	17.28	25.2	0.0	54.8				
09/06/2015	14:13:41	329	4.7	17.28	28.6	0.0	58.2				
09/06/2015	14:14:26	106	2.2	17.29	31.1	0.0	60.7				
09/06/2015	14:15:11	136	2.7	17.24	32.9	0.0	62.5				
09/06/2015	14:15:56	136	2.9	17.23	35.0	0.0	64.6				
09/06/2015	14:16:41	128	2.8	17.15	37.1	0.0	66.7				
09/06/2015	14:17:26	195	3.4	17.17	39.3	0.0	68.9				
09/06/2015	14:18:06	20	1.7	17.19	41.5	0.0	71.2	End Tail Slurry			
09/06/2015	14:18:07	11	1.0	17.23	41.6	0.0	71.2	Reset Total, Vol = 41.61 bbl			
09/06/2015	14:18:08	10	0.6	17.28	41.6	0.0	71.2	Start Pumping Spacer			
09/06/2015	14:18:11	11	0.2	17.30	41.6	0.0	71.2				
09/06/2015	14:18:56	13	0.0	17.30	41.6	0.0	71.2				
09/06/2015	14:19:41	13	0.0	17.30	0.0	0.0	71.2				
09/06/2015	14:20:26	13	0.0	17.30	0.0	0.0	71.2				
09/06/2015	14:21:11	13	0.0	17.29	0.0	0.0	71.2				
09/06/2015	14:21:56	13	0.0	17.29	0.0	0.0	71.2				
09/06/2015	14:22:41	148	4.7	14.43	1.4	0.0	72.7				
09/06/2015	14:23:26	149	4.8	14.43	5.0	0.0	76.2				
09/06/2015	14:24:11	134	4.8	14.00	8.6	0.0	79.8				
09/06/2015	14:24:56	3	0.0	14.85	11.2	0.0	82.4				
09/06/2015	14:25:41	5	0.0	14.69	11.2	0.0	82.4				
09/06/2015	14:26:26	14	0.0	14.73	0.0	0.0	82.4				
09/06/2015	14:27:06	14	0.0	14.76	0.0	0.0	82.4	Reset Total, Vol = 11.21 bbl			
09/06/2015	14:27:08	14	0.0	14.77	0.0	0.0	82.4	End Spacer			
09/06/2015	14:27:10	14	0.0	14.77	0.0	0.0	82.4	Start Displacement			
09/06/2015	14:27:11	14	0.0	14.77	0.0	0.0	82.4				
09/06/2015	14:27:56	13	0.0	14.78	0.0	0.0	82.4				
09/06/2015	14:28:41	13	0.0	14.78	0.0	0.0	82.4				
09/06/2015	14:29:26	13	0.0	14.78	0.0	0.0	82.4				
09/06/2015	14:30:11	12	0.0	14.77	0.0	0.0	82.4				
09/06/2015	14:30:56	13	0.0	14.76	0.0	0.0	82.4				
09/06/2015	14:31:41	12	0.0	14.75	0.0	0.0	82.4				
09/06/2015	14:32:26	13	0.0	14.74	0.0	0.0	82.4				
09/06/2015	14:33:11	128	4.7	12.40	1.5	1.5	83.9				
09/06/2015	14:33:56	107	4.0	12.38	4.5	4.5	86.9				
09/06/2015	14:34:41	104	4.0	12.27	7.5	7.5	89.9				

Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	14:36:11	114	4.0	12.55	13.6	13.6	96.0				
09/06/2015	14:36:56	113	4.0	12.55	16.6	16.6	99.0				
09/06/2015	14:37:41	109	4.0	12.55	19.6	19.6	102.0				
09/06/2015	14:38:26	118	4.0	12.54	22.6	22.6	105.0				
09/06/2015	14:39:11	115	4.0	12.54	25.6	25.6	108.0				
09/06/2015	14:39:56	112	4.0	12.50	28.6	28.6	111.0				
09/06/2015	14:40:41	116	4.0	12.53	31.6	31.6	114.0				
09/06/2015	14:41:26	118	4.0	12.57	34.6	34.6	117.0				
09/06/2015	14:42:11	112	4.0	12.57	37.6	37.6	120.0				
09/06/2015	14:42:56	118	4.0	12.57	40.6	40.6	123.0				
09/06/2015	14:43:41	120	4.0	12.56	43.6	43.6	126.0				
09/06/2015	14:44:26	114	4.0	12.56	46.6	46.6	129.0				
09/06/2015	14:45:11	120	4.0	12.55	49.6	49.6	132.0				
09/06/2015	14:45:56	121	4.0	12.58	52.6	52.6	135.1				
09/06/2015	14:46:41	114	4.0	12.58	55.6	55.6	138.1				
09/06/2015	14:47:26	112	4.0	12.58	58.6	58.6	141.1				
09/06/2015	14:48:11	121	4.0	12.58	61.7	61.7	144.1				
09/06/2015	14:48:56	123	4.0	12.58	64.7	64.7	147.1				
09/06/2015	14:49:41	118	4.0	12.58	67.7	67.7	150.1				
09/06/2015	14:50:26	112	4.0	12.58	70.7	70.7	153.1				
09/06/2015	14:51:11	124	4.0	12.59	73.7	73.7	156.1				
09/06/2015	14:51:56	144	3.9	12.59	76.7	76.7	159.1				
09/06/2015	14:52:41	212	3.9	12.59	79.6	79.6	162.1				
09/06/2015	14:53:26	246	3.9	12.58	82.5	82.5	165.0				
09/06/2015	14:54:11	278	3.9	12.59	85.4	85.4	167.9				
09/06/2015	14:54:56	323	3.9	12.59	88.4	88.4	170.8				
09/06/2015	14:55:41	133	3.4	12.59	91.3	91.3	173.7				
09/06/2015	14:56:26	9	0.0	12.70	91.5	91.5	173.9				
09/06/2015	14:57:11	10	0.0	12.69	91.5	91.5	173.9				
09/06/2015	14:57:56	8	0.0	12.61	91.5	91.5	173.9				
09/06/2015	14:58:41	92	3.2	12.57	92.1	92.1	174.6				
09/06/2015	14:59:26	45	3.9	12.21	94.6	94.6	177.0				
09/06/2015	15:00:11	3	0.0	12.03	94.9	94.9	177.3				
09/06/2015	15:00:56	41	2.5	8.80	96.4	96.4	178.8				
09/06/2015	15:01:41	4	0.1	8.21	97.3	97.3	179.8				
09/06/2015	15:02:26	12	2.2	7.29	97.9	97.9	180.3				
09/06/2015	15:02:55	-6	0.2	5.01	98.6	98.6	181.0	End Displacement			
09/06/2015	15:02:56	-6	0.1	5.40	98.6	98.6	181.0	Reset Total, Vol = 94 bbl			
09/06/2015	15:03:11	-12	0.6	2.25	98.8	98.6	181.2				
09/06/2015	15:03:54	-15	1.6	5.29	99.1	98.6	181.6	Plug 3 end			
09/06/2015	15:03:56	-18	0.9	5.46	99.2	98.6	181.6				
09/06/2015	15:04:41	34	3.1	8.82	100.9	98.6	183.3				
09/06/2015	15:05:26	34	2.7	8.75	103.1	98.6	185.5				
09/06/2015	15:06:11	30	2.4	8.65	105.0	98.6	187.4				
09/06/2015	15:06:56	21	1.9	8.48	106.7	98.6	189.1				
09/06/2015	15:07:41	8	0.5	7.83	108.0	98.6	190.4				
09/06/2015	15:53:18	-1	0.0	8.27	2.8	98.6	234.4	Start Job			
09/06/2015	15:53:26	-1	0.0	8.26	2.8	98.6	234.4				
09/06/2015	15:54:11	-1	0.0	8.26	0.0	98.6	234.4				
09/06/2015	15:54:56	-1	0.0	8.26	0.0	98.6	0.0	0			
09/06/2015	15:55:41	-1	0.0	8.26	0.0	98.6	0.0	FED 28 LUB			
09/06/2015	15:56:26	-1	0.0	8.26	0.0	98.6	0.0				
09/06/2015	15:57:11	1	0.0	8.26	0.0	98.6	0.0				
09/06/2015	15:57:56	28	1.4	12.25	1.0	98.6	1.0				

Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/W	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	15:59:26	101	0.1	12.57	3.6	98.6	3.6				
09/06/2015	16:00:11	182	0.9	12.58	4.5	98.6	4.5				
09/06/2015	16:00:56	238	1.5	12.59	5.1	98.6	5.1				
09/06/2015	16:01:41	259	1.8	12.60	6.4	98.6	6.4				
09/06/2015	16:02:26	273	2.0	12.61	7.9	98.6	7.9				
09/06/2015	16:03:11	285	2.0	12.63	9.3	98.6	9.3				
09/06/2015	16:03:56	287	2.0	12.64	10.8	98.6	10.8				
09/06/2015	16:04:41	270	2.0	12.65	12.3	98.6	12.3				
09/06/2015	16:05:26	274	2.0	12.65	13.8	98.6	13.8				
09/06/2015	16:06:11	274	2.0	12.65	15.2	98.6	15.2				
09/06/2015	16:06:56	283	2.0	12.66	16.7	98.6	16.7				
09/06/2015	16:07:41	286	2.0	12.66	18.2	98.6	18.2				
09/06/2015	16:08:26	281	2.0	12.66	19.6	98.6	19.6				
09/06/2015	16:09:11	283	2.0	12.66	21.1	98.6	21.1				
09/06/2015	16:09:56	273	2.0	12.66	22.6	98.6	22.6				
09/06/2015	16:10:41	276	2.0	12.66	24.1	98.6	24.1				
09/06/2015	16:11:26	273	2.0	12.66	25.5	98.6	25.5				
09/06/2015	16:12:11	276	2.0	12.66	27.0	98.6	27.0				
09/06/2015	16:12:56	274	2.0	12.66	28.5	98.6	28.5				
09/06/2015	16:13:41	273	2.0	12.66	30.0	98.6	30.0				
09/06/2015	16:14:26	275	2.0	12.66	31.4	98.6	31.4				
09/06/2015	16:15:11	275	2.0	12.65	32.9	98.6	32.9				
09/06/2015	16:15:56	272	2.0	12.65	34.4	98.6	34.4				
09/06/2015	16:16:41	275	2.0	12.65	35.9	98.6	35.9				
09/06/2015	16:17:26	274	2.0	12.65	37.3	98.6	37.3				
09/06/2015	16:18:11	284	2.0	12.65	38.8	98.6	38.8				
09/06/2015	16:18:56	284	2.0	12.65	40.3	98.6	40.3				
09/06/2015	16:19:41	284	2.0	12.65	41.7	98.6	41.7				
09/06/2015	16:20:26	284	2.0	12.65	43.2	98.6	43.2				
09/06/2015	16:21:11	290	2.0	12.65	44.7	98.6	44.7				
09/06/2015	16:21:56	286	2.0	12.65	46.2	98.6	46.2				
09/06/2015	16:22:41	289	2.0	12.65	47.6	98.6	47.6				
09/06/2015	16:23:26	293	2.0	12.64	49.1	98.6	49.1				
09/06/2015	16:24:11	290	2.0	12.64	50.6	98.6	50.6				
09/06/2015	16:24:56	291	2.0	12.64	52.1	98.6	52.1				
09/06/2015	16:25:41	288	2.0	12.64	53.5	98.6	53.5				
09/06/2015	16:26:26	289	2.0	12.64	55.0	98.6	55.0				
09/06/2015	16:27:11	205	1.1	12.64	55.7	98.6	55.7				
09/06/2015	16:27:56	232	0.9	12.65	56.3	98.6	56.3				
09/06/2015	16:28:41	201	1.0	12.64	57.0	98.6	57.0				
09/06/2015	16:29:26	243	1.0	12.64	57.7	98.6	57.7				
09/06/2015	16:30:11	217	1.1	12.64	58.5	98.6	58.5				
09/06/2015	16:30:56	225	1.1	12.63	59.3	98.6	59.3				
09/06/2015	16:31:41	238	1.1	12.63	60.1	98.6	60.1				
09/06/2015	16:32:26	249	1.1	12.63	60.9	98.6	60.9				
09/06/2015	16:33:11	211	1.0	12.63	61.7	98.6	61.7				
09/06/2015	16:33:56	280	1.6	12.63	62.7	98.6	62.7				
09/06/2015	16:34:41	266	1.7	12.62	64.0	98.6	64.0				
09/06/2015	16:35:26	287	1.7	12.62	65.3	98.6	65.3				
09/06/2015	16:36:11	272	1.7	12.62	66.5	98.6	66.5				
09/06/2015	16:36:56	265	1.7	12.62	67.8	98.6	67.8				
09/06/2015	16:37:41	288	1.7	12.62	69.1	98.6	69.1				
09/06/2015	16:38:26	270	1.7	12.63	70.3	98.6	70.3				
09/06/2015	16:39:11	267	1.7	12.63	71.6	98.6	71.6				

O Gas

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	16:40:41	265	1.7	12.62	74.1	98.6	74.1				
09/06/2015	16:41:26	291	1.7	12.63	75.4	98.6	75.4				
09/06/2015	16:42:11	274	1.7	12.62	76.7	98.6	76.7				
09/06/2015	16:42:56	267	1.7	12.62	77.9	98.6	77.9				
09/06/2015	16:43:41	292	1.7	12.62	79.2	98.6	79.2				
09/06/2015	16:44:26	266	1.7	12.62	80.5	98.6	80.5				
09/06/2015	16:45:11	287	1.7	12.62	81.7	98.6	81.7				
09/06/2015	16:45:56	280	1.7	12.62	83.0	98.6	83.0				
09/06/2015	16:46:41	269	1.7	12.62	84.3	98.6	84.3				
09/06/2015	16:47:26	287	1.7	12.62	85.5	98.6	85.5				
09/06/2015	16:48:11	267	1.7	12.61	86.8	98.6	86.8				
09/06/2015	16:48:56	284	1.7	12.61	88.1	98.6	88.1				
09/06/2015	16:49:41	282	1.7	12.61	89.3	98.6	89.3				
09/06/2015	16:50:26	262	1.7	12.61	90.6	98.6	90.6				
09/06/2015	16:51:11	270	1.7	12.61	91.9	98.6	91.9				
09/06/2015	16:51:56	283	1.7	12.61	93.1	98.6	93.1				
09/06/2015	16:52:41	251	1.7	12.61	94.4	98.6	94.4				
09/06/2015	16:53:26	248	0.1	12.61	95.6	98.6	95.6				
09/06/2015	16:54:11	301	0.0	12.61	95.6	98.6	95.6				
09/06/2015	16:54:56	297	0.0	12.60	95.6	98.6	95.6				
09/06/2015	16:55:41	297	0.0	12.60	95.6	98.6	95.6				
09/06/2015	16:56:26	297	0.0	12.60	95.6	98.6	95.6				
09/06/2015	16:57:11	364	0.0	12.61	95.6	98.6	95.6				
09/06/2015	16:57:56	364	0.0	12.61	95.6	98.6	95.6				
09/06/2015	16:58:41	364	0.0	12.61	95.6	98.6	95.6				
09/06/2015	16:59:26	5	0.3	12.61	96.5	98.6	96.5				
09/06/2015	17:00:11	5	0.0	12.62	96.5	98.6	96.5				
09/06/2015	17:00:39	7	0.0	12.62	96.5	98.6	96.5	Reverse Circ			
09/06/2015	17:00:43	7	0.0	12.62	96.5	98.6	96.5	Reset Total, Vol = 106.14 bbl			
09/06/2015	17:00:56	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:01:41	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:02:26	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:03:11	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:03:56	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:04:41	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:05:26	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:06:11	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:06:56	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:07:41	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:08:26	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:09:11	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:09:56	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:10:41	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:11:26	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:12:11	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:12:56	10	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:13:41	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:14:26	9	0.0	12.62	96.5	0.0	96.5	Office of 2015			
09/06/2015	17:15:11	9	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:15:56	9	0.0	12.62	96.5	0.0	96.5	FEB 26 2016			
09/06/2015	17:16:41	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:17:26	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:18:11	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:18:56	8	0.0	12.62	96.5	0.0	96.5				

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Well			Field			Job Start		Customer		Job Number	
MIP UNIT 3H 3H			UNDESIGNAT			Sep/06/2015		NORTHEAST NATURAL ENERGY LLC		DCHA-00109	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Stage Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/06/2015	17:20:26	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:21:11	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:21:56	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:22:41	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:23:26	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:24:11	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:24:56	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:25:41	8	0.0	12.61	96.5	0.0	96.5				
09/06/2015	17:26:26	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:27:11	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:27:56	7	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:28:41	8	0.0	12.61	96.5	0.0	96.5				
09/06/2015	17:29:26	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:30:11	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:30:56	8	0.0	12.62	96.5	0.0	96.5				
09/06/2015	17:31:41	8	0.0	12.61	96.5	0.0	96.5				
09/06/2015	17:32:26	8	0.0	12.61	96.5	0.0	96.5				
09/06/2015	17:33:11	8	0.0	12.61	96.5	0.0	96.5				
09/06/2015	17:33:56	8	0.0	12.61	96.5	0.0	96.5				

Post Job Summary

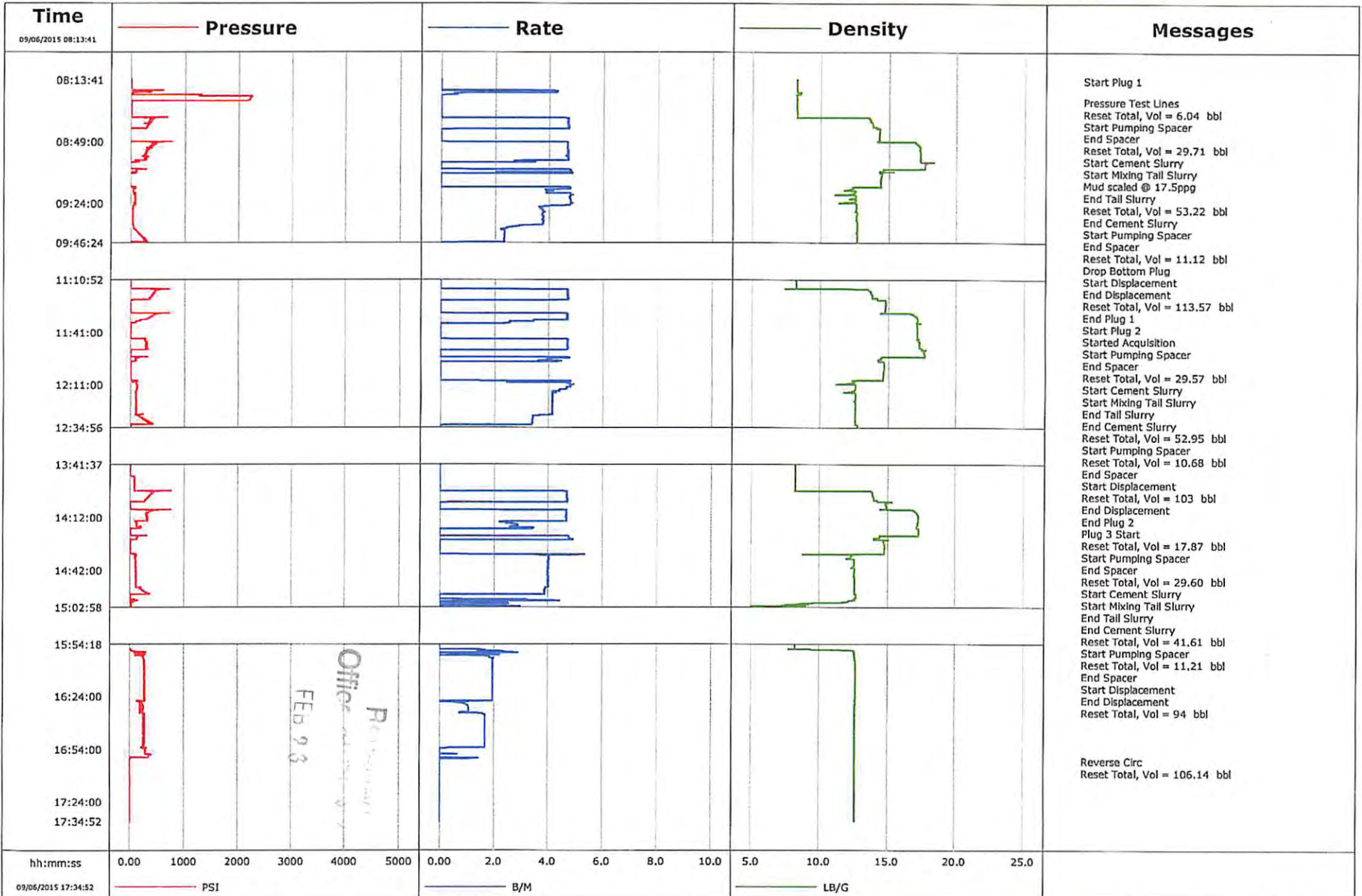
Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
1.7		0.0	2.9	0.0	0.0	0.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
414	8	170				bbl	lb/gal
Avg. N2 Percent %	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume		
	0.0 bbl	0.0 bbl	76 degF	<input type="checkbox"/>	bbl		
Customer or Authorized Representative			Schlumberger Supervisor		Washed Thru Perfs	To	ft
Brad Chadwick			TJ Williams		<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
					Circulation Lost		
					-		

C.

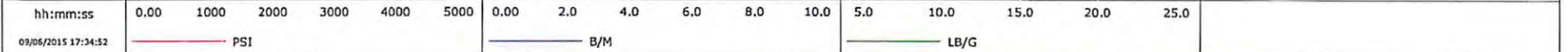
FEB 26 2016

06/17/2016

Well	MIP UNIT 3H	Client	NORTHEAST NATURAL ENERGY LLC
Field	UNDESIGNAT	SIR No.	DCHA-00109
Engineer	TJ Williams	Job Type	Kick Plug
Country	United States	Job Date	09-06-2015

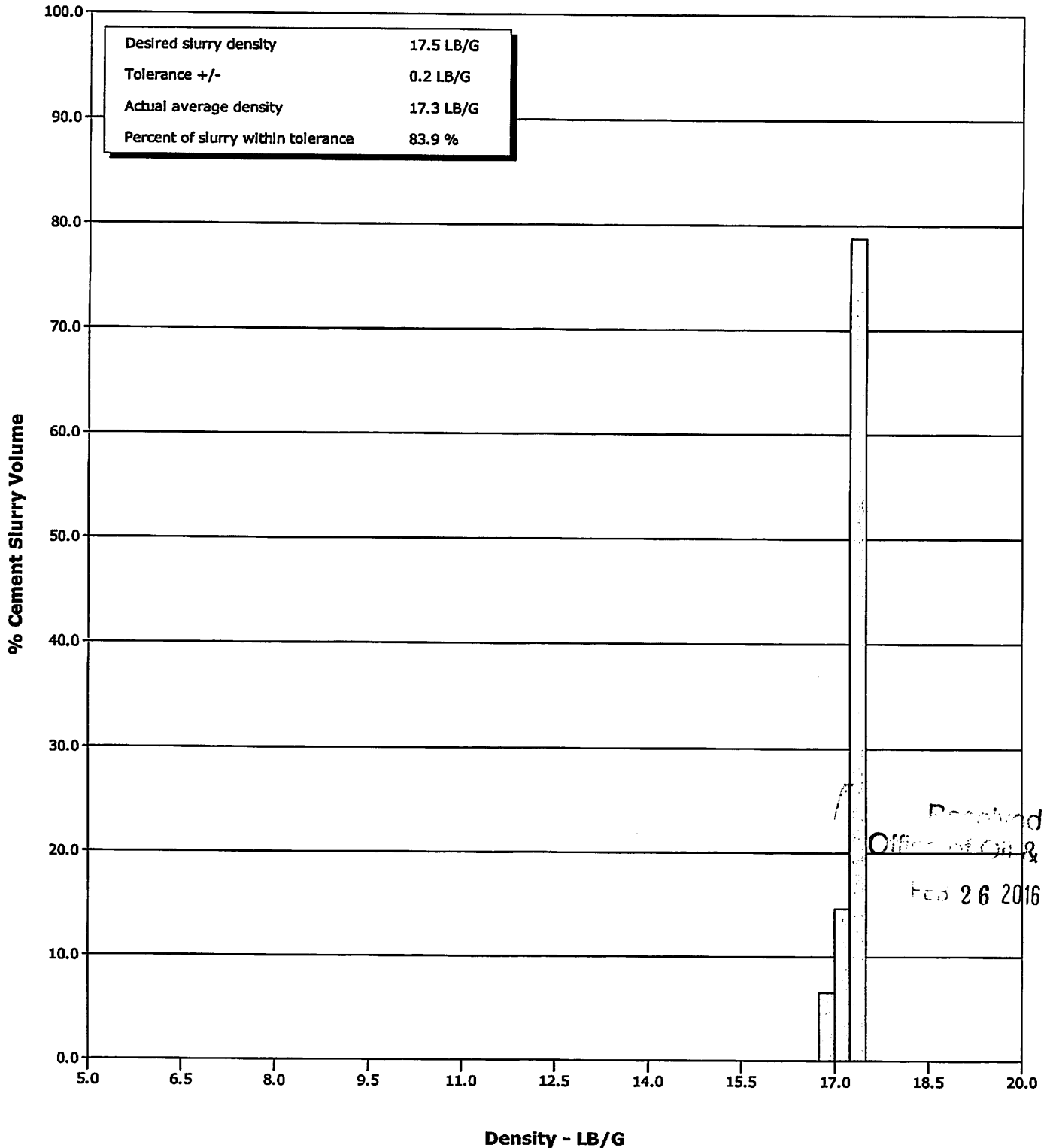


Office
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Well	MIP UNIT 3H	Client	NORTHEAST NATURAL ENERGY LLC
Field	UNDESIGNAT	SIR No.	DCHA-00109
Engineer	TJ Williams	Job Type	Kick Plug
Country	United States	Job Date	09-06-2015

Cement Slurry - 09/06/2015 08:49:06 to 09/06/2015 09:00:44



Received
Office of Oil & Gas
Feb 26 2016

Customer				Job Number					
Northeastern Natural Energy				DGE7-00001					
Well		Location (legal)		Schlumberger Location		Job Start			
MIP Unit 3H				Weston, WV		Sep/30/2015			
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD		
Undesignated		Marcellus/Shale		92 deg	8.8 in	13872.0 ft	7482.0 ft		
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient		
Monogalia		WV		7000 psi	149 degF	143 degF	7.70 lb/gal		
Well Master		API/UWI							
62008796		4706101707H0000							
Rig Name	Drilled For	Service Via	Casing/Liner						
Patterson # 254	Gas	Land	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread		
Offshore Zone	Well Class	Well Type	13872.0	5.5	20.0	110	BUTT		
	New	Development	0.0	0.0	0.0				
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe					
SBM		12.70 lb/gal	26.000 cP	T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Service Line	Job Type								
Cementing	Cem Prod Casing								
Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection	Perforations/Open Hole						
psi	psi	Double Cement head	Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval		
			ft	ft			ft		
			ft	ft			Diameter		
			ft	ft			in		
Service Instructions	Treat Down	Displacement	Packer Type	Packer Depth					
Northeast Natural Energy	Casing	307.0 bbl	None	0.0 ft					
MIP 3H 5.5 inch Primary Cement Job	Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.					
Pump 100 bbl MudPUSH @ 13.8 ppg	bbl	307.0 bbl	571.0 bbl	927.0 bbl					
Pump Lead Flex 222 bbl @ 15.0 ppg									
Sks 990 Yield 1.26 H2o 4.268									
Pump Tail CSlurry 367 @ 15.4 ppg									
Sks 1690 Yield 1.22 H2O 5.497									
Drop Top Plug (3rd Party)									
Displace H2O 307.3									
Casing/Tubing Secured <input checked="" type="checkbox"/>	1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>	Casing Tools	Squeeze Job						
Lift Pressure	11685 psi	Shoe Type	Float	Squeeze Type					
Pipe Rotated <input type="checkbox"/>	Pipe Reciprocated <input type="checkbox"/>	Shoe Depth	13872.0 ft	Tool Type					
No. Centralizers	Top Plugs 1	Bottom Plugs	Stage Tool Type	none	Tool Depth				
Cement Head Type	Double	Stage Tool Depth	0.0 ft	Tail Pipe Size					
Job Scheduled For	Arrived on Location	Leave Location	Collar Type	Float	Tail Pipe Depth				
Sep/30/2015 19:00	Sep/30/2015 19:00	Oct/01/2015 12:00	Collar Depth	13861.0 ft	Seq. Total Vol.				
					bbl				
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message	
09/30/2015	04:46:32	1	0.0	8.37	0.0	0.0	0.0	Started Acquisition	
09/30/2015	04:47:12	12	1.9	8.37	0.0	0.0	0.2		
09/30/2015	04:47:52	24	1.0	8.36	0.0	0.0	0.3		
09/30/2015	04:48:32	524	3.0	8.36	0.7	0.0	1.4		
09/30/2015	04:49:12	470	4.0	8.36	3.4	0.0	4.0		
09/30/2015	04:49:52	82	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:49:54	82	0.0	8.36	5.2	0.0	5.7	Pressure Test Lines	
09/30/2015	04:50:32	710	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:51:12	674	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:51:52	6455	0.0	8.37	5.2	0.0	5.7		
09/30/2015	04:52:32	3002	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:53:12	794	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:53:52	6822	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:54:32	6477	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:55:12	6200	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:55:52	5874	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:56:32	5771	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:57:12	7308	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:57:52	6557	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:58:32	6239	0.0	8.36	5.2	0.0	5.7		
09/30/2015	04:59:12	6086	0.0	8.36	5.2	0.0	5.7		

Well			Field			Job Start		Customer		Job Number	
MIP Unit 3H			Undesignated			Sep/30/2015		Northeastern Natural Energy		DGE7-00001	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/30/2015	05:00:32	6046	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:01:12	6034	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:01:52	6026	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:02:32	6019	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:03:12	6011	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:03:51	7	0.0	8.36	5.2	0.0	5.7	Reset Total, Vol = 5.74 bbl			
09/30/2015	05:03:52	5	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:03:56	9	0.0	8.36	5.2	0.0	5.7	Start Pumping Spacer			
09/30/2015	05:04:32	7	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:05:12	14	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:05:52	14	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:06:00	13	0.0	8.36	5.2	0.0	5.7	Bulk Temperature = 63degF			
09/30/2015	05:06:32	12	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:07:12	13	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:07:52	15	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:08:32	15	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:09:12	15	0.0	8.36	5.2	0.0	5.7				
09/30/2015	05:09:52	871	5.5	13.52	7.0	0.0	7.6				
09/30/2015	05:10:32	683	5.5	13.56	10.6	0.0	11.3				
09/30/2015	05:11:12	675	5.5	13.75	14.3	0.0	15.0				
09/30/2015	05:11:52	664	5.5	13.78	18.0	0.0	18.7				
09/30/2015	05:12:32	638	5.5	13.84	21.7	0.0	22.4				
09/30/2015	05:13:12	625	5.5	13.90	25.4	0.0	26.0				
09/30/2015	05:13:52	604	5.5	13.90	29.1	0.0	29.7				
09/30/2015	05:14:32	609	5.5	13.89	32.7	0.0	33.4				
09/30/2015	05:15:12	599	5.5	13.85	36.4	0.0	37.1				
09/30/2015	05:15:52	590	5.5	13.74	40.1	0.0	40.8				
09/30/2015	05:16:32	591	5.5	13.67	43.8	0.0	44.4				
09/30/2015	05:17:12	584	5.5	13.83	47.5	0.0	48.1				
09/30/2015	05:17:52	572	5.5	13.82	51.2	0.0	51.8				
09/30/2015	05:18:32	570	5.5	13.82	54.9	0.0	55.5				
09/30/2015	05:19:12	556	5.5	13.88	58.5	0.0	59.2				
09/30/2015	05:19:52	548	5.5	13.84	62.2	0.0	62.9				
09/30/2015	05:19:58	543	5.5	13.85	62.8	0.0	63.4	Dry Sample ABT 34065 # 053838 053854			
09/30/2015	05:20:32	534	5.5	13.89	65.9	0.0	66.6				
09/30/2015	05:20:54	519	5.5	13.91	67.9	0.0	68.6	Water Results PH 7 CL<100 mg/l			
09/30/2015	05:21:12	516	5.5	13.88	69.6	0.0	70.3				
09/30/2015	05:21:23	508	5.5	13.88	70.6	0.0	71.3	Sulfates <100 mg/l Hardness 100 ppm			
09/30/2015	05:21:52	498	5.5	13.88	73.3	0.0	74.0				
09/30/2015	05:22:32	497	5.5	13.90	77.0	0.0	77.7				
09/30/2015	05:23:12	483	5.5	13.92	80.7	0.0	81.4				
09/30/2015	05:23:52	480	5.6	13.91	84.4	0.0	85.1				
09/30/2015	05:24:32	471	5.6	13.91	88.1	0.0	88.8				
09/30/2015	05:25:12	458	5.6	13.91	91.8	0.0	92.5				
09/30/2015	05:25:52	289	4.2	13.90	95.1	0.0	95.8				
09/30/2015	05:26:32	282	4.1	13.84	97.9	0.0	98.5				
09/30/2015	05:27:12	19	0.0	15.04	99.8	0.0	100.4				
09/30/2015	05:27:52	13	0.0	14.97	99.8	0.0	100.4				
09/30/2015	05:27:54	13	0.0	14.97	99.8	0.0	100.4	Reset Total, Vol = 94.66 bbl			
09/30/2015	05:27:55	14	0.0	14.97	99.8	0.0	100.4	End Spacer			
09/30/2015	05:27:57	13	0.0	14.97	99.8	0.0	100.4	Start Mixing Lead Slurry			
09/30/2015	05:28:32	13	0.0	15.01	99.8	0.0	100.4				
09/30/2015	05:29:12	13	0.0	15.02	99.8	0.0	100.4				
09/30/2015	05:29:52	11	0.0	15.05	99.8	0.0	100.4				

Off
Gas
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Well			Field			Job Start		Customer	Job Number
MIP Unit 3H			Undesignated			Sep/30/2015		Northeastern Natural Energy	DGE7-00001
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message	
09/30/2015	05:31:12	11	0.0	15.05	99.8	0.0	100.4		
09/30/2015	05:31:52	6	1.0	14.10	99.9	0.0	100.5		
09/30/2015	05:32:32	268	4.4	14.90	102.5	0.0	103.1		
09/30/2015	05:33:12	477	4.4	14.96	105.4	0.0	106.1		
09/30/2015	05:33:52	453	4.4	14.95	108.4	0.0	109.0		
09/30/2015	05:34:32	426	4.5	15.00	111.3	0.0	112.0		
09/30/2015	05:35:12	433	4.4	15.02	114.3	0.0	115.0		
09/30/2015	05:35:52	418	4.5	15.08	117.3	0.0	117.9		
09/30/2015	05:36:32	819	6.4	15.14	120.9	0.0	121.6		
09/30/2015	05:37:12	755	6.4	15.15	125.2	0.0	125.9		
09/30/2015	05:37:52	749	6.4	15.15	129.5	0.0	130.1		
09/30/2015	05:38:32	759	6.4	15.15	133.6	0.0	134.4		
09/30/2015	05:39:12	736	6.4	15.15	138.0	0.0	138.7		
09/30/2015	05:39:52	710	6.4	15.16	142.2	0.0	142.9		
09/30/2015	05:40:32	640	6.4	15.11	146.5	0.0	147.2		
09/30/2015	05:41:12	643	6.4	15.11	150.8	0.0	151.4	Weight Confirmed Mud Scale 15.1 ppg	
09/30/2015	05:41:47	659	6.4	15.11	154.5	0.0	155.2	Dry Sample Silo 1378 # 053882 053842	
09/30/2015	05:41:52	611	6.4	15.11	155.0	0.0	155.7		
09/30/2015	05:42:32	630	6.4	15.11	159.3	0.0	160.0		
09/30/2015	05:43:12	655	6.4	15.11	163.6	0.0	164.2		
09/30/2015	05:43:52	632	6.4	15.12	167.8	0.0	168.5		
09/30/2015	05:44:32	610	6.4	15.07	172.1	0.0	172.7		
09/30/2015	05:44:55	605	6.4	15.09	174.5	0.0	175.2	Mixed Lead Temp 78.6F	
09/30/2015	05:45:12	187	3.3	15.05	176.0	0.0	176.6		
09/30/2015	05:45:46	88	2.5	18.06	177.6	0.0	178.2	Water temp 69.2F	
09/30/2015	05:45:52	91	2.3	15.14	177.8	0.0	178.4		
09/30/2015	05:46:32	80	1.9	14.99	179.2	0.0	179.8		
09/30/2015	05:47:12	104	2.1	15.06	180.6	0.0	181.2		
09/30/2015	05:47:52	314	4.4	15.04	182.7	0.0	183.4		
09/30/2015	05:48:32	330	4.5	15.11	185.7	0.0	186.3		
09/30/2015	05:49:12	308	4.4	15.02	188.6	0.0	189.3		
09/30/2015	05:49:52	574	6.4	15.06	191.8	0.0	192.5		
09/30/2015	05:50:32	607	6.4	15.17	196.1	0.0	196.8		
09/30/2015	05:51:12	583	6.3	15.20	200.3	0.0	201.0		
09/30/2015	05:51:52	637	6.4	15.17	204.6	0.0	205.3		
09/30/2015	05:52:32	570	6.4	15.14	208.8	0.0	209.5		
09/30/2015	05:53:12	590	6.4	15.13	213.1	0.0	213.8		
09/30/2015	05:53:52	634	6.4	15.15	217.4	0.0	218.0		
09/30/2015	05:54:32	605	6.4	15.17	221.6	0.0	222.3		
09/30/2015	05:55:12	552	6.4	15.14	225.9	0.0	226.6		
09/30/2015	05:55:52	585	6.4	15.15	230.2	0.0	230.8		
09/30/2015	05:56:32	567	6.3	15.13	234.4	0.0	235.1		
09/30/2015	05:57:12	594	6.4	15.13	238.7	0.0	239.4		
09/30/2015	05:57:52	606	6.4	15.13	243.0	0.0	243.6		
09/30/2015	05:58:32	594	6.4	15.09	247.2	0.0	247.9		
09/30/2015	05:59:12	603	6.4	15.11	251.5	0.0	252.2		
09/30/2015	05:59:52	566	6.4	15.11	255.7	0.0	256.4		
09/30/2015	06:00:32	568	6.4	15.10	260.0	0.0	260.7		
09/30/2015	06:01:12	560	6.4	15.09	264.3	0.0	264.9		
09/30/2015	06:01:52	569	6.4	15.09	268.5	0.0	269.2		
09/30/2015	06:02:32	588	6.4	15.09	272.8	0.0	273.5		
09/30/2015	06:03:12	560	6.4	15.11	277.0	0.0	277.7		
09/30/2015	06:03:52	553	6.4	15.08	281.3	0.0	282.0		
09/30/2015	06:04:32	601	6.4	15.10	285.5	0.0	286.2		

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Well			Field			Job Start		Customer		Job Number	
MIP Unit 3H			Undesignated			Sep/30/2015		Northeastern Natural Energy		DGE7-00001	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/30/2015	06:05:52	551	6.4	15.11	294.1	0.0	294.7				
09/30/2015	06:06:32	576	6.4	15.11	298.3	0.0	299.0				
09/30/2015	06:07:12	605	6.4	15.11	302.6	0.0	303.2				
09/30/2015	06:07:52	552	6.4	15.09	306.9	0.0	307.5				
09/30/2015	06:08:32	318	4.5	15.04	310.0	0.0	310.6				
09/30/2015	06:09:12	335	4.4	15.07	312.9	0.0	313.6				
09/30/2015	06:09:52	98	2.2	15.13	315.5	0.0	316.1				
09/30/2015	06:10:00	97	2.2	15.12	315.7	0.0	316.3	End Lead Slurry			
09/30/2015	06:10:32	104	2.4	15.10	317.0	0.0	317.6				
09/30/2015	06:11:12	107	2.3	15.11	318.5	0.0	319.2				
09/30/2015	06:11:52	104	2.2	15.32	320.1	0.0	320.7				
09/30/2015	06:12:32	107	2.0	15.49	321.4	0.0	322.0				
09/30/2015	06:13:12	367	4.5	15.57	323.7	0.0	324.3				
09/30/2015	06:13:52	571	6.4	15.53	327.3	0.0	327.9				
09/30/2015	06:14:32	589	6.4	15.54	331.5	0.0	332.2				
09/30/2015	06:15:12	556	6.4	15.53	335.8	0.0	336.5				
09/30/2015	06:15:52	823	8.3	15.52	340.3	0.0	341.0				
09/30/2015	06:15:56	819	8.3	15.52	340.9	0.0	341.6	Weight confirmed with mus scale 15.4 ppg			
09/30/2015	06:16:03	825	8.3	15.51	341.8	0.0	342.5	Start Mixing Tail Slurry			
09/30/2015	06:16:32	801	8.3	15.51	345.8	0.0	346.5				
09/30/2015	06:17:12	818	8.3	15.49	351.3	0.0	352.0				
09/30/2015	06:17:52	796	8.3	15.50	356.9	0.0	357.6				
09/30/2015	06:18:32	792	8.3	15.49	362.4	0.0	363.1				
09/30/2015	06:19:12	853	8.3	15.47	367.9	0.0	368.6				
09/30/2015	06:19:52	875	8.3	15.48	373.4	0.0	374.1				
09/30/2015	06:20:32	861	8.3	15.48	378.9	0.0	379.6				
09/30/2015	06:21:12	866	8.3	15.50	384.4	0.0	385.1				
09/30/2015	06:21:52	875	8.3	15.52	390.0	0.0	390.7				
09/30/2015	06:22:08	874	8.3	15.52	392.2	0.0	392.9	Dry Sample Silo 37261 # 053820 053826			
09/30/2015	06:22:32	887	8.3	15.52	395.5	0.0	396.2				
09/30/2015	06:23:12	873	8.3	15.52	401.0	0.0	401.7				
09/30/2015	06:23:52	877	8.3	15.54	406.5	0.0	407.2				
09/30/2015	06:24:32	879	8.3	15.53	412.1	0.0	412.8				
09/30/2015	06:24:35	878	8.3	15.53	412.5	0.0	413.2	Dry Sample Silo 30167 # 053851 053891			
09/30/2015	06:25:12	897	8.3	15.53	417.6	0.0	418.3				
09/30/2015	06:25:52	896	8.3	15.54	423.1	0.0	423.8				
09/30/2015	06:26:32	887	8.3	15.54	428.6	0.0	429.3				
09/30/2015	06:27:12	890	8.3	15.56	434.1	0.0	434.8				
09/30/2015	06:27:52	899	8.3	15.57	439.6	0.0	440.3				
09/30/2015	06:28:32	893	8.3	15.56	445.1	0.0	445.8				
09/30/2015	06:29:12	902	8.3	15.56	450.7	0.0	451.4				
09/30/2015	06:29:52	883	8.3	15.53	456.2	0.0	456.9				
09/30/2015	06:30:32	901	8.3	15.54	461.7	0.0	462.4				
09/30/2015	06:31:12	903	8.3	15.57	467.2	0.0	467.9				
09/30/2015	06:31:52	907	8.3	15.58	472.7	0.0	473.4				
09/30/2015	06:32:32	913	8.3	15.55	478.3	0.0	479.0				
09/30/2015	06:33:12	832	7.7	15.54	483.4	0.0	484.1				
09/30/2015	06:33:52	555	6.4	15.50	488.7	0.0	489.4				
09/30/2015	06:34:32	544	6.4	15.49	493.0	0.0	493.7				
09/30/2015	06:35:12	577	6.4	15.46	497.2	0.0	497.9				
09/30/2015	06:35:52	330	4.5	15.19	501.1	0.0	501.7				
09/30/2015	06:36:32	468	5.4	15.37	504.1	0.0	504.8				
09/30/2015	06:37:12	668	8.3	15.16	509.0	0.0	509.7				
09/30/2015	06:37:52	718	7.8	15.53	514.3	0.0	514.9				

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Well		Field			Job Start		Customer		Job Number
MIP Unit 3H		Undesignated			Sep/30/2015		Northeastern Natural Energy		DGE7-00001
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message	
09/30/2015	06:39:12	936	8.3	15.54	524.8	0.0	525.5		
09/30/2015	06:39:52	805	7.8	15.51	530.1	0.0	530.8		
09/30/2015	06:40:32	837	7.8	15.48	535.3	0.0	536.0		
09/30/2015	06:41:12	869	7.8	15.50	540.5	0.0	541.2		
09/30/2015	06:41:52	833	7.8	15.49	545.7	0.0	546.4		
09/30/2015	06:42:32	840	7.8	15.52	550.9	0.0	551.5		
09/30/2015	06:43:12	881	7.8	15.55	556.0	0.0	556.7		
09/30/2015	06:43:52	864	7.8	15.55	561.2	0.0	561.9		
09/30/2015	06:44:32	980	8.3	15.57	566.5	0.0	567.2		
09/30/2015	06:45:12	996	8.3	15.59	572.0	0.0	572.7		
09/30/2015	06:45:24	994	8.3	15.59	573.7	0.0	574.4	Dry Sample Slt 34608 # 53802 53809	
09/30/2015	06:45:52	1006	8.3	15.60	577.5	0.0	578.2		
09/30/2015	06:46:32	1009	8.3	15.60	583.0	0.0	583.7		
09/30/2015	06:47:12	1019	8.3	15.59	588.5	0.0	589.2		
09/30/2015	06:47:52	1025	8.3	15.59	594.1	0.0	594.8		
09/30/2015	06:48:32	1046	8.3	15.57	599.6	0.0	600.3		
09/30/2015	06:49:12	1047	8.3	15.54	605.1	0.0	605.8		
09/30/2015	06:49:52	1038	8.3	15.54	610.6	0.0	611.3		
09/30/2015	06:50:32	1051	8.3	15.53	616.1	0.0	616.8		
09/30/2015	06:51:12	1072	8.3	15.53	621.6	0.0	622.3		
09/30/2015	06:51:52	1096	8.3	15.53	627.1	0.0	627.8		
09/30/2015	06:52:32	1092	8.3	15.56	632.6	0.0	633.3		
09/30/2015	06:53:12	1103	8.3	15.56	638.2	0.0	638.9		
09/30/2015	06:53:52	1125	8.3	15.55	643.7	0.0	644.4		
09/30/2015	06:54:32	1152	8.3	15.54	649.2	0.0	649.9		
09/30/2015	06:55:12	1161	8.2	15.54	654.7	0.0	655.4		
09/30/2015	06:55:52	1155	8.2	15.52	660.2	0.0	660.9		
09/30/2015	06:56:32	1167	8.2	15.53	665.7	0.0	666.4		
09/30/2015	06:57:12	1197	8.3	15.53	671.2	0.0	671.9		
09/30/2015	06:57:52	730	6.4	15.49	676.5	0.0	677.2		
09/30/2015	06:58:32	341	4.5	15.48	680.6	0.0	681.3		
09/30/2015	06:59:12	312	4.5	15.49	683.6	0.0	684.3		
09/30/2015	06:59:52	339	4.5	15.32	686.7	0.0	687.3		
09/30/2015	07:00:32	48	2.2	15.57	689.6	0.0	690.2		
09/30/2015	07:00:56	11	0.0	15.62	689.7	0.0	690.3	End Tail Slurry	
09/30/2015	07:01:00	10	0.0	15.61	689.7	0.0	690.3	Reset Total, Vol = 589.91 bbl	
09/30/2015	07:01:12	10	0.0	15.58	689.7	0.0	690.3		
09/30/2015	07:01:52	18	0.0	15.46	689.7	0.0	690.3		
09/30/2015	07:02:00	19	0.0	15.45	689.7	0.0	690.3	Wash up unit	
09/30/2015	07:02:32	16	0.0	15.33	689.7	0.0	690.3		
09/30/2015	07:03:12	45	0.0	15.21	689.7	0.0	690.3		
09/30/2015	07:03:52	200	1.8	9.29	689.8	0.0	690.4		
09/30/2015	07:04:32	202	4.0	10.05	691.3	0.0	691.9		
09/30/2015	07:05:12	173	3.9	9.50	693.9	0.0	694.5		
09/30/2015	07:05:52	155	3.9	9.05	696.5	0.0	697.1		
09/30/2015	07:06:32	39	2.2	9.68	698.2	0.0	698.8		
09/30/2015	07:07:12	66	2.5	9.06	699.8	0.0	700.4		
09/30/2015	07:07:52	64	2.5	8.80	701.4	0.0	702.0		
09/30/2015	07:08:32	143	3.7	8.44	703.8	0.0	704.4		
09/30/2015	07:09:12	142	3.7	8.39	706.3	0.0	706.9		
09/30/2015	07:09:29	41	3.4	8.38	707.3	0.0	707.9	Reset Total, Vol = 17.64 bbl	
09/30/2015	07:09:31	17	1.9	8.38	707.4	0.0	708.0	Drop Top Plug	
09/30/2015	07:09:32	9	1.0	8.38	707.5	0.0	708.0	Start Displacement	
09/30/2015	07:09:52	3	0.0	8.38	707.5	0.1	708.1		

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Well			Field			Job Start		Customer	Job Number
MIP Unit 3H			Undesignated			Sep/30/2015		Northeastern Natural Energy	DGE7-00001
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message	
09/30/2015	07:11:12	-2	0.0	8.37	710.0	2.5	710.5		
09/30/2015	07:11:52	-4	0.0	8.37	710.0	2.5	710.5		
09/30/2015	07:12:32	-5	0.0	8.37	710.0	2.5	710.5		
09/30/2015	07:13:12	-3	0.0	8.37	710.0	2.5	710.5		
09/30/2015	07:13:52	7	0.0	8.37	710.0	2.5	710.5		
09/30/2015	07:14:32	17	1.1	8.37	710.0	2.5	710.6		
09/30/2015	07:15:12	174	6.4	8.39	712.6	5.2	713.3		
09/30/2015	07:15:52	174	6.4	8.37	716.9	9.5	717.6		
09/30/2015	07:16:32	163	6.4	8.37	721.2	13.7	721.8		
09/30/2015	07:17:12	237	8.0	8.36	725.8	18.4	726.5		
09/30/2015	07:17:52	1189	7.9	8.36	731.1	23.7	731.8		
09/30/2015	07:18:32	1214	7.9	8.36	736.4	28.9	737.1		
09/30/2015	07:19:12	1294	8.0	8.36	741.6	34.2	742.3		
09/30/2015	07:19:52	1370	7.9	8.37	746.9	39.5	747.6		
09/30/2015	07:20:32	1484	8.1	8.37	752.3	44.8	753.0		
09/30/2015	07:21:12	1582	8.1	8.36	757.7	50.2	758.4		
09/30/2015	07:21:52	1666	8.1	8.36	763.1	55.6	763.8		
09/30/2015	07:22:32	1746	8.1	8.36	768.5	61.0	769.2		
09/30/2015	07:23:12	1849	8.1	8.37	773.9	66.4	774.6		
09/30/2015	07:23:52	1947	8.1	8.37	779.2	71.8	779.9		
09/30/2015	07:24:32	2032	8.1	8.37	784.6	77.2	785.3		
09/30/2015	07:25:12	2114	8.0	8.37	790.0	82.6	790.7		
09/30/2015	07:25:52	2214	8.0	8.37	795.4	87.9	796.1		
09/30/2015	07:26:32	2327	8.0	8.37	800.7	93.3	801.4		
09/30/2015	07:27:12	2419	8.0	8.37	806.1	98.6	806.8		
09/30/2015	07:27:52	2510	8.0	8.37	811.4	104.0	812.1		
09/30/2015	07:28:32	2605	8.0	8.37	816.8	109.3	817.5		
09/30/2015	07:29:12	2712	8.0	8.37	822.1	114.7	822.8		
09/30/2015	07:29:52	2807	8.0	8.37	827.4	120.0	828.1		
09/30/2015	07:30:32	2885	8.0	8.37	832.8	125.3	833.5		
09/30/2015	07:31:12	2988	8.0	8.37	838.1	130.7	838.8		
09/30/2015	07:31:52	3073	8.0	8.37	843.4	136.0	844.1		
09/30/2015	07:32:32	3173	8.0	8.37	848.8	141.3	849.5		
09/30/2015	07:33:12	3262	7.9	8.36	854.1	146.6	854.8		
09/30/2015	07:33:52	3345	7.9	8.37	859.3	151.9	860.0		
09/30/2015	07:34:32	3417	7.8	8.37	864.6	157.1	865.2		
09/30/2015	07:35:12	3474	7.8	8.37	869.8	162.3	870.5		
09/30/2015	07:35:52	3539	7.7	8.37	874.9	167.5	875.6		
09/30/2015	07:36:32	3601	7.8	8.37	880.1	172.7	880.8		
09/30/2015	07:37:12	3614	7.7	8.37	885.3	177.8	886.0		
09/30/2015	07:37:52	3636	7.7	8.37	890.4	183.0	891.1		
09/30/2015	07:38:32	3646	7.7	8.37	895.6	188.1	896.3		
09/30/2015	07:39:12	3647	7.7	8.37	900.7	193.3	901.4		
09/30/2015	07:39:52	3674	7.7	8.37	905.9	198.4	906.6		
09/30/2015	07:40:32	3650	7.7	8.37	911.0	203.6	911.7		
09/30/2015	07:41:12	3674	7.7	8.37	916.2	208.7	916.9		
09/30/2015	07:41:52	3685	7.7	8.37	921.3	213.9	922.0	Oil Gas	
09/30/2015	07:42:32	3688	7.7	8.37	926.4	219.0	927.1		
09/30/2015	07:43:12	3713	7.7	8.37	931.6	224.1	932.3	26 2016	
09/30/2015	07:43:52	3723	7.7	8.37	936.7	229.2	937.4		
09/30/2015	07:44:32	3725	7.7	8.37	941.8	234.4	942.5		
09/30/2015	07:45:12	3743	7.7	8.37	946.9	239.5	947.6		
09/30/2015	07:45:52	3722	7.7	8.37	952.0	244.6	952.7		
09/30/2015	07:46:32	3746	7.7	8.36	957.2	249.7	957.9		

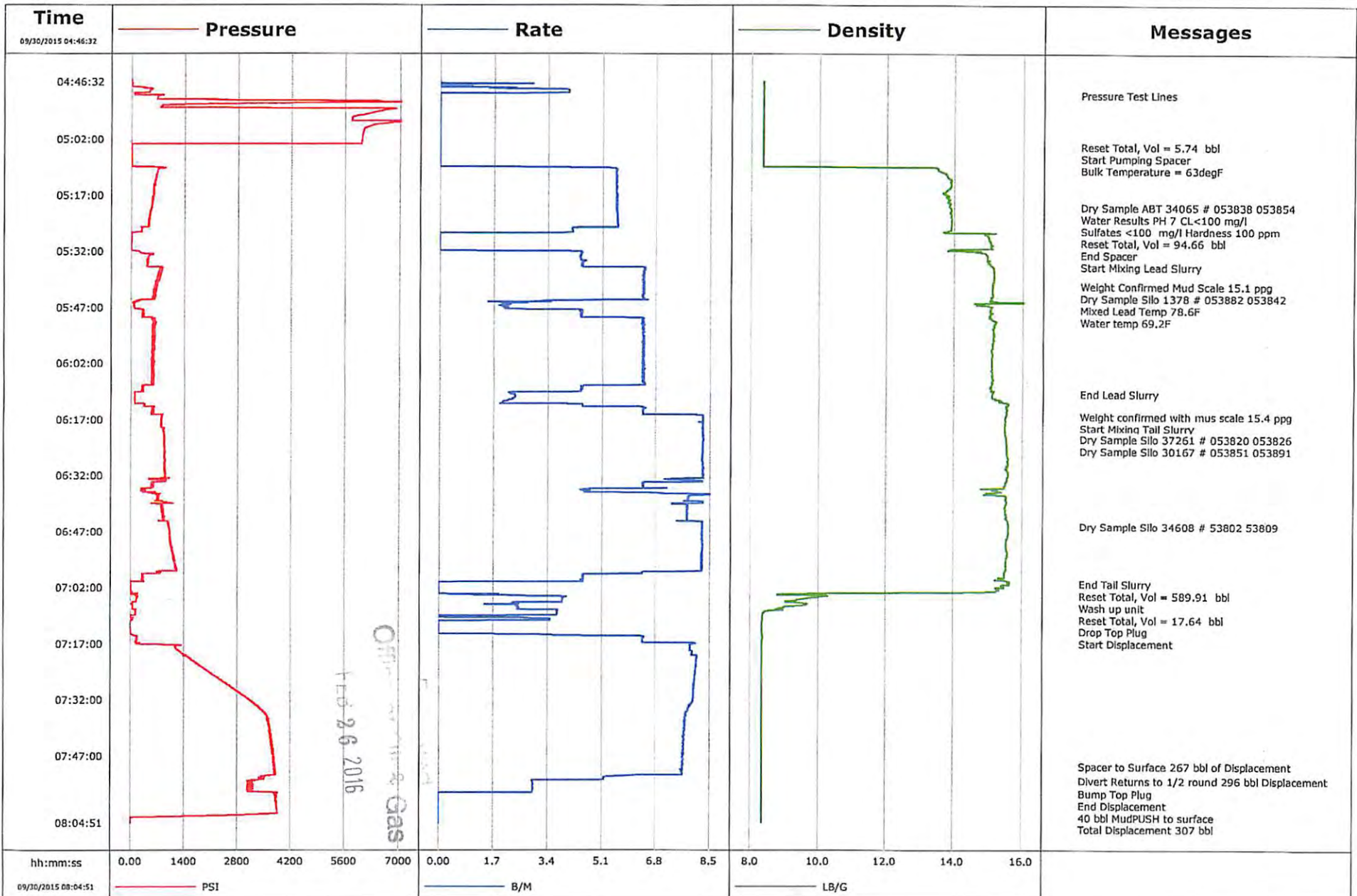
Well			Field			Job Start		Customer		Job Number	
MIP Unit 3H			Undesignated			Sep/30/2015		Northeastern Natural Energy		DGE7-00001	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Displacement Volume BBL	Total Slurry Volume BBL	Message			
09/30/2015	07:47:52	3765	7.7	8.37	967.4	259.9	968.1				
09/30/2015	07:48:32	3763	7.7	8.37	972.5	265.1	973.2				
09/30/2015	07:49:12	3765	7.7	8.37	977.6	270.2	978.3				
09/30/2015	07:49:41	3756	7.7	8.37	981.3	273.9	982.0	Spacer to Surface 267 bbl of Displacement			
09/30/2015	07:49:52	3785	7.7	8.37	982.7	275.3	983.4				
09/30/2015	07:50:32	3785	7.7	8.37	987.8	280.4	988.5				
09/30/2015	07:51:12	3776	7.6	8.37	992.9	285.5	993.6				
09/30/2015	07:51:52	3820	7.6	8.37	998.0	290.6	998.7				
09/30/2015	07:52:32	3459	5.6	8.37	1002.7	295.2	1003.3				
09/30/2015	07:53:12	3466	5.2	8.37	1006.1	298.7	1006.8				
09/30/2015	07:53:32	3267	4.3	8.37	1007.9	300.4	1008.5	Divert Returns to 1/2 round 296 bbl Displacement			
09/30/2015	07:53:52	3078	2.9	8.37	1008.9	301.5	1009.5				
09/30/2015	07:54:32	3168	2.9	8.37	1010.9	303.5	1011.5				
09/30/2015	07:55:12	3064	2.9	8.37	1012.9	305.4	1013.5				
09/30/2015	07:55:52	3140	2.9	8.37	1014.8	307.4	1015.4				
09/30/2015	07:56:32	3071	2.9	8.37	1016.8	309.4	1017.4				
09/30/2015	07:57:00	3794	0.0	8.37	1017.9	310.4	1018.4	Bump Top Plug			
09/30/2015	07:57:02	3834	0.0	8.37	1017.9	310.4	1018.4	End Displacement			
09/30/2015	07:57:12	3805	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	07:57:52	3804	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	07:58:21	3811	0.0	8.37	1017.9	310.4	1018.4	40 bbl MudPUSH to surface			
09/30/2015	07:58:30	3808	0.0	8.37	1017.9	310.4	1018.4	Total Displacement 307 bbl			
09/30/2015	07:58:32	3809	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	07:59:12	3821	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	07:59:52	3828	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:00:00	3836	0.0	8.37	1017.9	310.4	1018.4	Floats held			
09/30/2015	08:00:32	3838	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:01:12	3847	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:01:52	3857	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:02:32	3738	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:03:12	1511	0.0	8.37	1017.9	310.4	1018.4				
09/30/2015	08:03:44	4	0.0	8.37	1017.9	310.4	1018.4	Volume returned to tanks when checking floats = 4bbls			
09/30/2015	08:03:52	2	0.0	8.37	1017.9	310.4	1018.4				

Post Job Summary

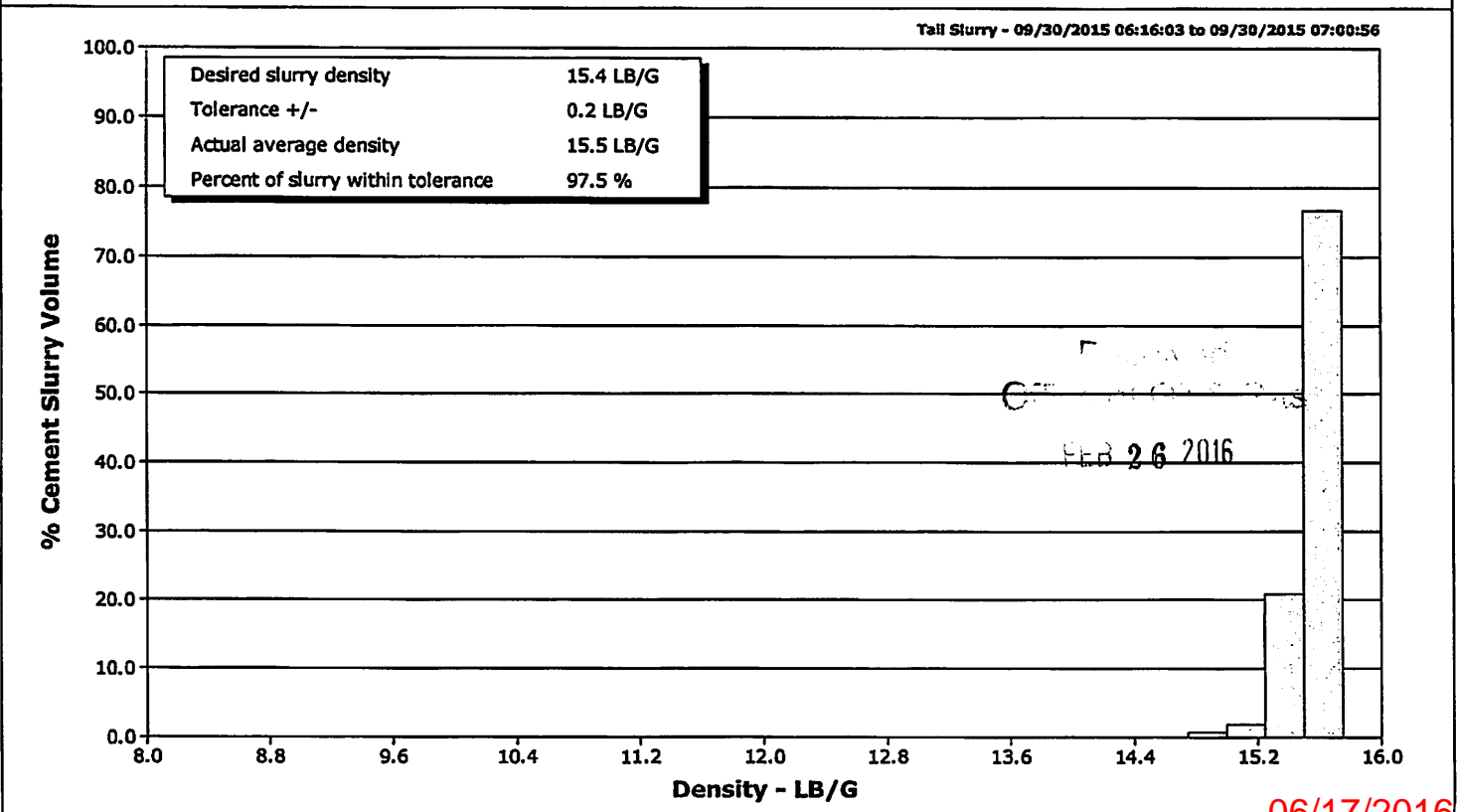
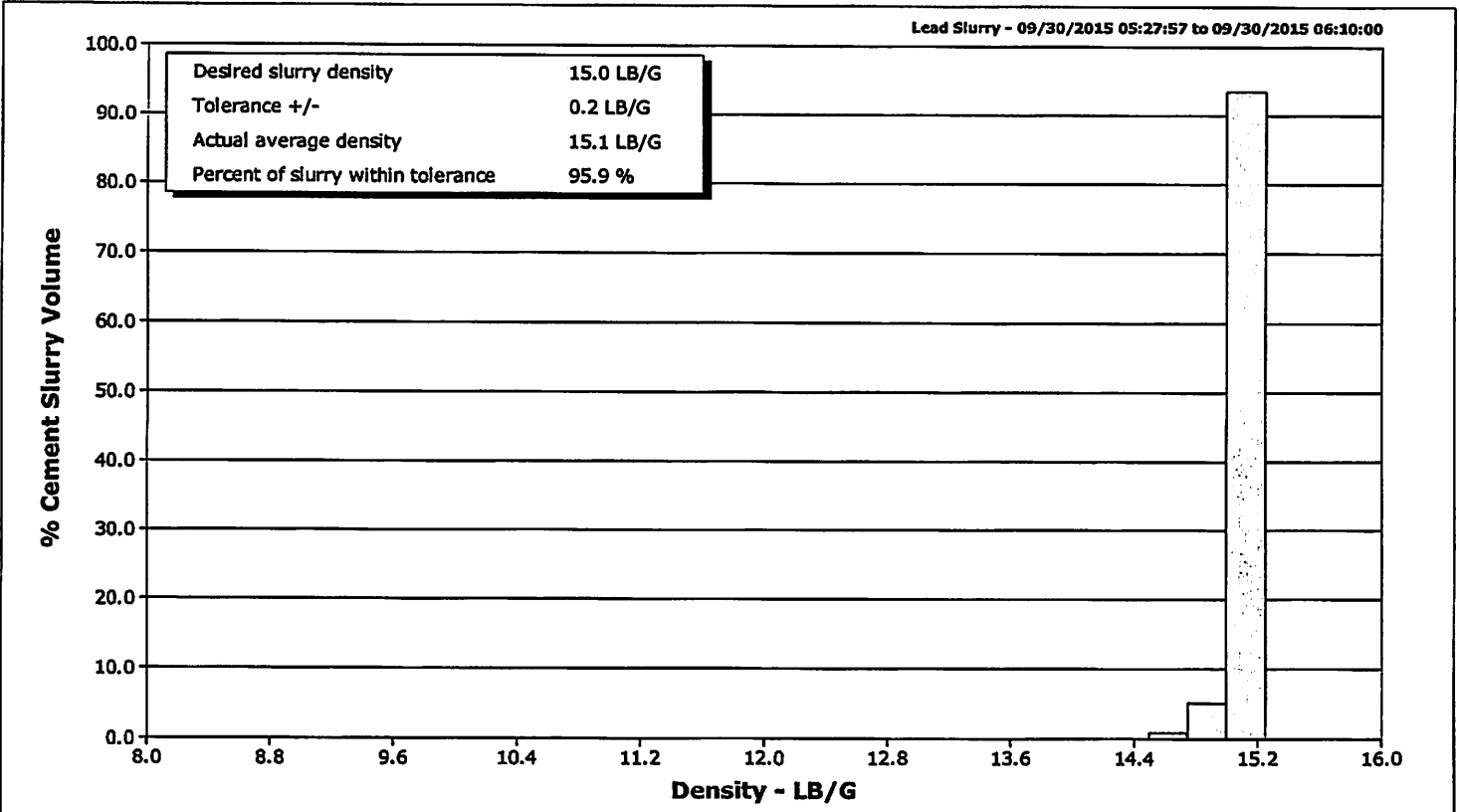
Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
6.5			9.2	589.0	0.0	100.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
7579	4	1444	4200			bbl	lb/gal
Avg. N2 Percent %	Designed Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume	bbl
	589.0 bbl		307.0 bbl	68 degF	<input type="checkbox"/>	To	ft
Customer or Authorized Representative			Schlumberger Supervisor		Circulation Lost	<input type="checkbox"/>	Job Completed
Brad Chadwick			Donald Casler		-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Well	MIP Unit 3H	Client	Northeastern Natural Energy
Field	Undesignated	SIR No.	DGE7-00001
Engineer	Donald Casler	Job Type	Cem Prod Casing
Country	United States	Job Date	09-30-2015



Well	MIP Unit	Client	Northeastern Natural Energy
Field	Undesignated	SIR No.	DGE7-00001
Engineer	Donald Casler	Job Type	Cem Prod Casing
Country	United States	Job Date	09-30-2015



Perforation Record

Stage Number	Report Date	Perforated from MD ft	Perforated to MD ft	Number of Perforations	Formation
1	11/6/2015	13811	13625	50	Marcellus Shale
2	11/7/2015	13578	13398	50	Marcellus Shale
3	11/7/2015	13355	13162	50	Marcellus Shale
4	11/7/2015	13120	12932	50	Marcellus Shale
5	11/8/2015	12886	12697	50	Marcellus Shale
6	11/8/2015	12652	12452	50	Marcellus Shale
7	11/9/2015	12420	12239	50	Marcellus Shale
8	11/9/2015	12186	12015	50	Marcellus Shale
9	11/9/2015	11973	11782	50	Marcellus Shale
10	11/9/2015	11737	11557	50	Marcellus Shale
11	11/11/2015	11511	11324	50	Marcellus Shale
12	11/11/2015	11279	11093	50	Marcellus Shale
13	11/11/2015	11048	10863	30	Marcellus Shale
14	11/11/2015	10824	10639	30	Marcellus Shale
15	11/12/2015	10596	10456	26	Marcellus Shale
16	11/12/2015	10410	10278	26	Marcellus Shale
17	11/12/2015	10141	10090	32	Marcellus Shale
18	11/13/2015	10050	9912	32	Marcellus Shale
19	11/13/2015	9871	9732	32	Marcellus Shale
20	11/14/2015	9687	9504	40	Marcellus Shale
21	11/14/2015	9447	9271	40	Marcellus Shale
22	11/14/2015	9229	9051	40	Marcellus Shale
23	11/14/2015	9007	8814	40	Marcellus Shale
24	11/15/2015	8765	8587	30	Marcellus Shale
25	11/15/2015	8543	8356	32	Marcellus Shale
26	11/15/2015	8312	8128	40	Marcellus Shale
27	11/15/2015	8087	7944	40	Marcellus Shale
28	11/15/2015	7903	7753	40	Marcellus Shale

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Stimulation Record

Stage Number	Report Date	Avg Treating Rate (BPM)	Avg Treating Pressure (psi)	Breakdown Pressure (psi)	ISIP (psi)	Total Proppant Amount (lbs)	Total Clean Fluid (Bbls)
1	11/6/2015	81.8	8902	6995	5867	420600	10671
2	11/7/2015	88.4	8799	6078	6048	346380	7912
3	11/7/2015	85	8767	6214	5703	399320	8537
4	11/7/2015	90	8705	5940	5978	440060	9135
5	11/8/2015	91	8594	6222		337620	8037
6	11/8/2015	89.3	8552	6005	6205	440180	9544
7	11/9/2015	87.1	8328	6053	5867	440880	9212
8	11/9/2015	95	8951	6458	5992	440500	8773
9	11/9/2015	99	8991	6553	6210	440960	8696
10	11/9/2015	100	8253	6785	6241	440020	8408
11	11/11/2015	99.9	8135	5930	6022	440520	8052
12	11/11/2015	99.2	8201	6085	5898	440680	8984
13	11/11/2015	95	8696	6312	6015	360380	7466
14	11/11/2015	98.3	8694	6905	5867	437060	8788
15	11/12/2015	79.9	8131	7138	5681	359960	8590
16	11/12/2015	78	8573	7161	5961	188460	6137
17	11/12/2015	79	8114	7960		337760	6976
18	11/13/2015	92	8561	6236	6427	291860	6904
19	11/13/2015	99	8588	6001	5992	360720	7807
20	11/14/2015	96.7	8270	6332	5867	439320	7497
21	11/14/2015	95	8365	6506	5898	441000	7279
22	11/14/2015	93	8089	6837	6022	439940	10779
23	11/14/2015	99.8	8418	7562	6223	436160	8646
24	11/15/2015	98.8	8562	6373	6333	440280	8264
25	11/15/2015	98.7	8560	6640	6459	442700	8066
26	11/15/2015	99.9	8472	6945	6205	440500	7240
27	11/15/2015	93	8469	6895	6335	453260	6538
28	11/15/2015	94.1	8324	7185	6335	360560	7376

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/6/2015
Job End Date:	11/15/2015
State:	West Virginia
County:	Monongalia
API Number:	47-061-01707-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	MIP 3H
Longitude:	-79.97612300
Latitude:	39.60178300
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,483
Total Base Water Volume (gal):	10,647,966
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Ingredients shown above are subject to 29 CFR 1910.1200(l) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Proppant Transport	Schlumberger	Corrosion Inhibitor, Scale Inhibitor, Biocide, AntiFoam Agent, Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Fluid Loss Additive					
			Water (Including Mix Water Supplied by Client)*	NA		87.63568	
			Quartz, Crystalline silica	14808-60-7	99.06784	12.21724	
			Hydrochloric acid	7647-01-0	0.66726	0.08228	
			Ammonium sulfate	7783-20-2	0.06845	0.00844	
			Guar gum	9000-30-0	0.05865	0.00724	
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.05052	0.00623	
			Glutaraldehyde	111-30-8	0.02831	0.00349	
			Ethanol, 2,2',2"-nitritoltris-, 1,1',1"-tris(dihydrogen phosphate), sodium salt	68171-29-9	0.00971	0.00120	
			Diammonium peroxidisulphate	7727-54-0	0.00601	0.00074	

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			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.00541	0.00067
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00506	0.00062
			Sodium erythorbate	6381-77-7	0.00436	0.00054
			Trisodium ortho phosphate	7601-54-9	0.00427	0.00053
			Urea	57-13-6	0.00332	0.00041
			Polypropylene glycol	25322-69-4	0.00294	0.00036
			Methanol	67-56-1	0.00252	0.00031
			Fatty acids, tall-oil	61790-12-3	0.00156	0.00019
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00129	0.00016
			Ethylene Glycol	107-21-1	0.00121	0.00015
			Non-crystalline silica (impurity)	7631-86-9	0.00084	0.00010
			Vinylidene chloride/methylacrylate copolymer	25038-72-6	0.00080	0.00010
			Sodium sulfate	7757-82-6	0.00078	0.00010
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00061	0.00008
			Ethanol	64-17-5	0.00061	0.00007
			Propargyl alcohol	107-19-7	0.00041	0.00005
			2-Propenamid (impurity)	79-06-1	0.00017	0.00002
			Hexadec-1-ene	629-73-2	0.00014	0.00002
			1-Octadecene (C18)	112-88-9	0.00007	0.00001
			Dimethyl siloxanes and silicones	63148-62-9	0.00005	0.00001
			Tetrasodium ethylenediaminetetraacetate	64-02-8	0.00009	0.00001
			Dodecamethylcyclohexasiloxane	540-97-6		
			Siloxanes and silicones, dimethyl, reaction products with silica	67762-90-7	0.00001	
			Octamethylcyclotetrasiloxane	556-67-2		
			poly(tetrafluoroethylene)	9002-84-0	0.00001	
			Formaldehyde	50-00-0	0.00001	
			Copper(II) sulfate	7758-98-7		
			Decamethyl cyclopentasiloxane	541-02-6		
			Magnesium silicate hydrate (talc)	14807-96-6	0.00002	
FR Pro 150	ECM	Friction Reduction				
			Water	7732-18-5	50.00000	0.01575
			Polyacrylamide-co-acrylic acid	9003-06-9	32.00000	0.01008
			Sodium Chloride	7647-14-5	15.00000	0.00472
			Alcohol Ethoxylate Surfactants	Trade	5.00000	0.00157
			Petroleum Distillate	64742-47-8	25.00000	

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* Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/28/2015
Job End Date:	11/5/2015
State:	West Virginia
County:	Monongalia
API Number:	47-061-01699-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	MIP 5H
Longitude:	-79.97615200
Latitude:	39.60183300
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,530
Total Base Water Volume (gal):	9,961,350
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Proppant Transport	Schlumberger	Corrosion Inhibitor, Scale Inhibitor, Biocide, Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Fluid Loss Additive, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		87.58016	
			Quartz, Crystalline silica	14808-60-7	98.77034	12.26228	
			Hydrochloric acid	7647-01-0	0.90405	0.11223	
			Ammonium sulfate	7783-20-2	0.12127	0.01506	
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.08951	0.01111	
			Glutaraldehyde	111-30-8	0.03083	0.00383	
			Guar gum	9000-30-0	0.02213	0.00275	
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.00959	0.00119	

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			Ethanol, 2,2',2"-nitrioltris-, 1,1',1"-tris(dihydrogen phosphate), sodium salt	68171-29-9	0.00943	0.00117
			Sodium erythorbate	6381-77-7	0.00589	0.00073
			Urea	57-13-6	0.00589	0.00073
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00551	0.00068
			Trisodium ortho phosphate	7601-54-9	0.00415	0.00051
			Methanol	67-56-1	0.00332	0.00041
			Fatty acids, tall-oil	61790-12-3	0.00210	0.00026
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00174	0.00022
			Sodium sulfate	7757-82-6	0.00137	0.00017
			Non-crystalline silica (impurity)	7631-86-9	0.00128	0.00016
			Ethylene Glycol	107-21-1	0.00118	0.00015
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00082	0.00010
			Ethanol	64-17-5	0.00066	0.00008
			Propargyl alcohol	107-19-7	0.00055	0.00007
			2-Propenamid (impurity)	79-06-1	0.00029	0.00004
			Hexadec-1-ene	629-73-2	0.00018	0.00002
			Tetrasodium ethylenediaminetetraacetate	64-02-8	0.00015	0.00002
			Diammonium peroxidisulphate	7727-54-0	0.00008	0.00001
			1-Octadecene (C18)	112-88-9	0.00009	0.00001
			Dimethyl siloxanes and silicones	63148-62-9	0.00008	0.00001
			Decamethyl cyclopentasiloxane	641-02-6	0.00001	
			Siloxanes and silicones, dimethyl, reaction products with silica	67762-90-7	0.00001	
			Octamethylcyclotetrasiloxane	656-67-2	0.00001	
			Formaldehyde	50-00-0	0.00001	
			Dodecamethylcyclohexasiloxane	540-97-6		
			Copper(II) sulfate	7758-98-7		
FR Pro 150	ECM	Friction Reduction				
			Water	7732-18-5	50.00000	0.00240
			Polyacrylamide-co-acrylic acid	9003-06-9	32.00000	0.00154
			Sodium Chloride	7647-14-5	15.00000	0.00072
			Alcohol Ethoxylate Surfactants	Trade	5.00000	0.00024
			Hydrotreated Petroleum Distillate	64742-47-8	25.00000	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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