

PM

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

API 47 - 051 - 01660 County Marshall District Sandhill
Quad Majorsville Pad Name SHL-26 Field/Pool Name _____
Farm name Russell Lee and Barbara Ann Bennett Well Number SHL26CHS
Operator (as registered with the OOG) Noble Energy Inc.
Address 333 Technology Drive, Suite 116 City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4424887.141531 Easting 538580.612706
Landing Point of Curve Northing 4425284.884596 Easting 538892.156038
Bottom Hole Northing 4427331.072998 Easting 537411.266825

Elevation (ft) 1310.00 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 Oil Based

Date permit issued 08/19/2013 Date drilling commenced 10/2/2013 Date drilling ceased 12/29/2013
Date completion activities began 03/17/2014 Date completion activities ceased 6/1/2014
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 198', 300' Open mine(s) (Y/N) depths N
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N
Coal depth(s) ft 761' to 771' Pittsburgh Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

RECEIVED
Office of Oil and Gas
SEP 11 2014
WV Department of
Environmental Protection
Reviewed by:

API 47- 051 - 01660 Farm name Russell Lee and Barbara Ann Bennett Well number SHL26CHS

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	36	30	40	N	K-55 94#		
Surface	24	20	418.5	N	J-55 94#		Y
Coal	17 1/2	13 3/8	1233.9	N	J-55 54.5#		Y
Intermediate 1	12 3/8	9 5/8	3218	N	J-55 36#		Y
Intermediate 2							
Intermediate 3							
Production	8 3/4	5 1/2	15738	N	P-110 23#		Y
Tubing							
Packer type and depth set							

Comment Details 2 Baskets on Surface Casing

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							
Surface	Type 1	487	15.6	1.2	104	0	8
Coal	Type 1	1027	15.6	1.2	220	0	8
Intermediate 1	Class A	1160	16.2	1.09	225	0	19
Intermediate 2							
Intermediate 3							
Production	Class A	2681	14.8	1.26	597	3000	9
Tubing							

Drillers TD (ft) 15,748 Loggers TD (ft) 15713
 Deepest formation penetrated Marcellus Plug back to (ft) not a pilot Hole
 Plug back procedure not a pilot Hole

Kick off depth (ft) 7455

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 _____
4 Centralizers on Surface casing, 10 Centralizers on Coal casing, 40 Centralizers on Intermediate casing, 253 Centralizers on Production casing.
 On the Surface, Coal, and Intermediate Strings, the centralizers are on every 3 joint of casing.
 On the Production String, they are on every 3rd from Surface to Top of Curve, then every joint until TD.

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

PERFORATION RECORD

API: 47-051-01660

Farm name:

Russell Lee and Barbara
Ann Bennett

Well Name: SHL-26C-HS

Stage No.	Stim Date	Top Perf	Bottom Perf	# of Perfs	Formation
TOE SLEEVE	3/7/2014	15612	15,614		Marcellus
1	3/17/2014	15425	15,592	48	Marcellus
2	3/18/2014	15175	15,377	40	Marcellus
3	3/19/2014	14873	15,127	40	Marcellus
4	3/19/2014	14573	14,827	40	Marcellus
5	3/19/2014	14273	14,527	40	Marcellus
6	3/21/2014	14025	14,227	40	Marcellus
7	3/21/2014	13723	13,977	40	Marcellus
8	3/22/2014	13475	13,677	40	Marcellus
9	3/23/2014	13173	13,427	40	Marcellus
10	3/24/2014	12873	13,127	40	Marcellus
11	3/24/2014	12573	12,827	40	Marcellus
12	3/25/2014	12273	12,527	40	Marcellus
13	3/26/2014	11973	12,227	40	Marcellus
14	4/22/2014	11673	11,927	40	Marcellus
15	4/22/2014	11373	11,627	40	Marcellus
15 REPERF	4/23/2014	11363	11,480	40	Marcellus
16	4/24/2014	11073	11,327	40	Marcellus
17	4/24/2014	10773	11,027	40	Marcellus
18	4/24/2014	10475	10,727	48	Marcellus
19	4/25/2014	10175	10,427	48	Marcellus
20	4/25/2014	9875	10,127	48	Marcellus
21	4/25/2014	9575	9,827	48	Marcellus
22	4/25/2014	9275	9,527	48	Marcellus
23	4/26/2014	8975	9,227	48	Marcellus
24	4/26/2014	8675	8,927	48	Marcellus
25	4/26/2014	8375	8,627	48	Marcellus
26	4/27/2014	8075	8,327	48	Marcellus
27	4/27/2014	7775	8,027	48	Marcellus
28	4/27/2014	7475	7,727	48	Marcellus

STIMULATION INFORMATION PER STAGE

API: 47-051-01660

Farm name: _____

Russell Lee and Barbara Ann
Bennett

Well Name: SHL-26C-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
1 Inj Test	3/17/2014		7427		6070	0	476.4048	
1.1	3/17/2014	86.0	8548	5467		169,058	7566.976	
1.2	3/17/2014	86.4	8538	5467		165,687	6143.524	
1.3	3/18/2014	88.4	8491	5400	3665	164,798	5659.571	
2.1	3/18/2014	82.7	8254	6024		167,673	6957.986	
2.2	3/18/2014	86.1	8385	5319		168,349	6308.405	
2.3	3/19/2014	88.1	8590	5233	4164	167,441	5521.619	
3.1	3/19/2014	87.6	8267	5609		202,095	6382.119	
3.2	3/19/2014	88.2	8065	5315		198,908	5556.524	
3.3	3/19/2014	88.1	8869	5217	3942	197,386	5304.833	
4.1	3/20/2014	87.4	8275	5870		198,965	5987.719	
4.2	3/20/2014	87.9	8266	5714		199,935	5340.595	
4.3	3/20/2014	90.7	8316	5727	3997	201,591	5325.571	
5.1	3/20/2014	88.7	8253	6036		201,402	6476.786	
5.2	3/20/2014	86.8	7918	5172		204,360	5357.667	
5.3	3/20/2014	86.4	8002	5310	3999	204,595	5092.333	
6.1	3/21/2014	81.5	9068	5994		167,198	6398.765	
6.2	3/21/2014	83.6	8270	6338		168,225	6766.595	
6.3	3/21/2014	87.9	8339	6002	4063	164,059	4769.81	
7.1	3/22/2014	87.5	8157	5808		199,733	6367.581	
7.2	3/22/2014	86.0	8125	5957		199,058	5963.143	
7.3	3/22/2014	87.9	8145	6156	3876	202,823	5401.586	
8.1	3/23/2014	85.1	7952	5324		168,379	6411.19	
8.2	3/23/2014	88.1	8097	4499		168,958	4760.429	
8.3	3/23/2014	88.4	7978	5788	4305	164,464	4677.146	
9.1	3/23/2014	88.7	9007	5498		205,479	6042.712	
9.2	3/23/2014	89.0	7772	5073		195,681	5238.548	
9.3	3/23/2014	88.4	7784	4927	4150	198,666	5057.167	
10.1	3/24/2014	87.8	8820	5288		200,070	6508.567	
10.2	3/24/2014	88.8	7685	5346		200,012	5283.762	
10.3	3/24/2014	88.7	7809	5645	4158	188,666	5057.881	
11.1	3/25/2014	86.1	7965	5681		208,477	7120.379	
11.2	3/25/2014	74.6	8451	6152		202,117	5511.595	
11.3	3/25/2014	82.9	8438	6205	4094	202,744	5195.696	
12.1	3/25/2014	86.7	7605	5679		208,193	6077.054	
12.2	3/26/2014	86.7	8643	5767		195,411	5242.524	
12.3	3/26/2014	86.9	7574	5584	3999	193,796	5552.667	
13.1	3/26/2014	85.8	7829	5833		201,320	6230.869	
13.2	3/26/2014	87.4	8064	5944		204,668	5641.31	
13.3	3/26/2014	87.0	7456	5351	4570	194,216	5048.186	
14.1	4/22/2014	87.0	7230	5802		201,760	5794.167	

09/19/2014

STIMULATION INFORMATION PER STAGE

API: 47-051-01660

Farm name: _____

Russell Lee and Barbara Ann
Bennett

Well Name: SHL-26C-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
14.2	4/22/2014	86.6	7665	6182		202,421	5463.357	
14.3	4/22/2014	87.1	7461	5917	4065	198,448	5241.976	
15.1	4/22/2014	87.4	7797	5686		202,150	5560.42	
15.2	4/22/2014	84.9	8295	5854		199,069	5201.786	
15.3	4/22/2014	31.1	9245	6706	5911		2695.476	
15B	4/23/2014	83.8	7973		4040	204,500	5927.543	
16.1	4/23/2014	90.3	7607	5438		201,298	6039.072	
16.2	4/23/2014	90.1	7779	5670		199,838	5752.905	
16.3	4/24/2014	90.6	7835	5187	4446	200,188	5750.19	
17.1	4/24/2014	90.1	7577	5031		198,040	6804.167	
17.2	4/24/2014	47.1	8835	8478		918	1669.31	
17B.2	4/24/2014	87.1	7494	6265		200,933	5449.986	
17B.3	4/24/2014	87.5	7355	5607	4507	203,544	5297.524	
18.1	4/24/2014	90.0	7088	5466		200,774	5988.181	
18.2	4/24/2014	90.4	7400	4891		200,384	5685.286	
18.3	4/24/2014	90.2	7253	4505	4503	201,030	5449.476	
19.1	4/25/2014	90.7	7178	5456		200,117	5773.831	
19.2	4/25/2014	90.4	7460	5011		200,344	5578.286	
19.3	4/25/2014	88.3	7677	6080	4469	199,821	5790.976	
20.1	4/25/2014	85.8	7080	5465		200,400	6584.238	
20.2	4/25/2014	86.9	7219	5398		201,219	5456.143	
20.3	4/25/2014	87.2	7162	5812	4613	201,501	5269.857	
21.1	4/25/2014	86.5	7187	5295		201,346	5402.571	
21.2	4/25/2014	83.2	7448	5143		199,870	5974.286	
21.3	4/25/2014	88.3	6751	5272	4506	199,496	5554.452	
22.1	4/25/2014	89.2	6986	5511		200,665	5820.671	
22.2	4/25/2014	88.9	7363	5716		200,346	5547.286	
22.3	4/25/2014	72.5	8501	5646	4353	199,798	10776.71	
23.1	4/26/2014	80.1	7842	4864		200,198	6792.605	
23.2	4/26/2014	77.9	7892	6685		199,714	5519.452	
23.3	4/26/2014	83.5	7643	6113	4390	201,316	5507.333	
24.1	4/26/2014	87.7	6834	5586		200,764	6035.371	
24.2	4/26/2014	87.7	7309	5544		199,628	5514.286	
24.3	4/26/2014	88.8	7357	5233	3976	198,957	5468.667	
25.1	4/27/2014	86.2	6943	6183		189,743	6317.441	
25.2	4/27/2014	87.9	7255	8062		207,843	5979.286	
25.3	4/27/2014	88.2	7483	5767	4198	206,836	5103.024	
26.1	4/27/2014	83.5	6914	5039		195,253	6083.975	
26.2	4/27/2014	79.5	7545	5955		206,245	5436.548	
26.3	4/27/2014	87.4	7523	6044	4195	197,509	4973.571	
27.1	4/27/2014	88.3	6847	6406		200,459	5852.051	

STIMULATION INFORMATION PER STAGE

API: 47-051-01660

Farm name: Russell Lee and Barbara Ann Bennett

Well Name: SHL-26C-HS

Stage No.	Stim Date	Avg Rate (bpm)	ATP (psi)	Max BD Pressure	ISIP (psi)	Proppant (lbs)	Water (BBLs)	Amount of N ² / other
27.2	4/27/2014	88.1	7399	5939		200,411	5830.286	
27.3	4/27/2014	88.1	7831	5862	4300	199,996	5597.571	
28.1	4/28/2014	88.7	6559	5680		200,646	5839.451	
28.2	4/28/2014	89.2	6645	5154		199,820	5551.286	
28.3	4/28/2014	88.9	6650	5011	4467	200,898	5361.167	

API 47- 051 - 01660 Farm name Russell Lee and Barbara Ann Bennett Well number SHL26CHS

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6657.7</u> TVD	<u>15748</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 2678 mcfpd Oil 0 bpd NGL 121 bpd Water 1176 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		

PLEASE SEE FORMATIONS SHEET

Please insert additional pages as applicable.

Drilling Contractor Nabors Drilling USA, LP
Address 515 West Greens Rd, Suite 1000 City Houston State TX Zip 77067-4525

Logging Company Horizon Well Logging, LLC
Address 7136 S. Yale Ave. Suite 414 City Tulsa State OK Zip 74136

Cementing Company CalFrac
Address 717 17th St., Suite 1445 City Denver State OK Zip 80202

Stimulating Company Halliburton Energy Services
Address 121 Champion Way, Suite 210 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Dee Swiger Telephone 724-820-3061
Signature Dee Swiger Title Reg. Analyst Date 8-8-14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

FORMATIONS

API 47-051-5101660		Farm Name		Russell Lee and Barbara Ann Bennett		Well Name		SHL26C	
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)				
Shale	0	808	0	808					
Pittsburgh Coal	808	817	808	817					
Shale and Sandstone	817	1264	817	1264					
Dunkard Sand	1264	1275	1264	1275					
Shale	1275	1446	1275	1446					
Gas Sand	1446	1485	1446	1485					
Shale	1485	1577	1485	1577					
1st Salt Sand	1577	1601	1577	1601					
Shale	1601	1610	1601	1611					
2nd Salt Sand	1610	1655	1611	1656					
Shale	1655	1738	1656	1739					
Maxton Sand	1738	1750	1739	1751					
Shale	1750	1793	1751	1794					
Big Lime	1793	1873	1794	1875					
Big Injun	1873	2067	1875	2069					
Price	2067	2425	2069	2427					
Murrysville	2425	2439	2427	2441					
Shale	2439	2636	2441	2638					
50' Sand	2636	2638	2638	2640					
Shale	2638	2691	2640	2693					
30' Sand	2691	2700	2693	2702					
Shale	2700	2742	2702	2744					
Gordon Stray	2742	2757	2744	2759					
Shale	2757	2793	2759	2795					
Gordon	2793	2806	2795	2808					
Shale	2806	2902	2808	2904					
Fifth Sand	2902	2936	2904	2938					
Shale	2936	3342	2938	3345					
Speechley Sand	3342	3370	3345	3373					
Shale	3370	4378	3373	4381					
Warren Sand	4378	4387	4381	4390					
Shale	4387	5045	4390	5097					
Java Shale	5045	5216	5097	5317					
Pipe Creek Shale	5216	5273	5317	5388					
Angola Shale	5273	5898	5388	6183					
Rhinestreet	5898	6314	6183	6733					
Cashaqua	6314	6405	6733	6856					
Middlesex	6405	6440	6856	6907					
West River	6440	6492	6907	6991					
Burkett	6492	6515	6991	7031					
Tully Limestone	6515	6545	7031	7087					
Hamilton	6545	6656	7087	7386					
Marcellus	6656	6706	7386	not encountered	Gas				

09/19/2014

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/17/2014
Job End Date:	4/28/2014
State:	West Virginia
County:	Marshall
API Number:	47-051-01660-00-00
Operator Name:	Noble Energy, Inc.
Well Name and Number:	SHL26 C
Longitude:	-80.54840600
Latitude:	39.97318600
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,659
Total Base Water Volume (gal):	20,657,586
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
Fresh Water	Operator	Base Fluid					
			Fresh Water	7732-18-5	100.00000	90.56068	Density = 8.340
SAND - PREMIUM WHITE	Halliburton	Proppant					
			Crystalline silica, quartz	14808-60-7	100.00000	6.78130	
SAND - COMMON WHITE	Halliburton	Proppant					
			Crystalline silica, quartz	14808-60-7	100.00000	1.69401	
HYDROCHLORIC ACID 5-10%	Halliburton	Solvent					
			Hydrochloric acid	7647-01-0	10.00000	0.08220	
FDP-S1078-12	Halliburton	Friction Reducer					
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02089	
			Ammonium chloride	12125-02-9	10.00000	0.00696	
			Alcohols, C12-16, ethoxylated	68551-12-2	10.00000	0.00696	
			9-Octadecenamamide, n,n-bis-2 (hydroxy-ethyl)-, (Z)	93-83-4	5.00000	0.00348	
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive					
			Acetic anhydride	108-24-7	100.00000	0.00426	
			Acetic acid	64-19-7	60.00000	0.00256	

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BE-9W	Halliburton	Biocide					
			Tributyl tetradecyl phosphonium chloride	81741-28-8	10.00000	0.00402	
Scalechek LP-65 Scale Inhibitor	Halliburton	Scale Inhibitor					
			Ammonium chloride	12125-02-9	10.00000	0.00236	
Biovert NWB	Halliburton	Viscosifier					
			Poly lactide resin	Confidential	100.00000	0.00209	Denise Tuck, Halliburton 3000 N. Sam Houston Pkwy E., Houston, TX 77032 281-871-6226
LoSurf-300D	Halliburton	Non-ionic Surfactant					
			Ethanol	64-17-5	60.00000	0.00086	
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00043	
			Naphthalene	91-20-3	5.00000	0.00007	
			Poly(oxy-1,2-ethanediyl), alpha-4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00000	0.00007	
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00001	
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor					
			Methanol	67-56-1	60.00000	0.00042	
			Propargyl alcohol	107-19-7	10.00000	0.00007	
FDP-S1125-14	Halliburton	Diverter					
			Contains no hazardous ingredients	NA	100.00000	0.00008	
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.							
		Other Ingredient(s)					
			Water	7732-18-5		0.89725	
		Other Ingredient(s)					
			Propylene glycol	57-55-6		0.02411	
		Other Ingredient(s)					
			Polyacrylate	Confidential		0.02089	
		Other Ingredient(s)					
			inorganic salt	Confidential		0.02089	
		Other Ingredient(s)					
			Organic phosphonate	Confidential		0.01417	
		Other Ingredient(s)					
			Fatty acid ester	Confidential		0.00348	
		Other Ingredient(s)					
			Oxyalkylated phenolic resin	Confidential		0.00043	
		Other Ingredient(s)					
			Formaldehyde	50-00-0		0.00024	
		Other Ingredient(s)					
			Fatty acids, tall oil	Confidential		0.00021	
		Other Ingredient(s)					

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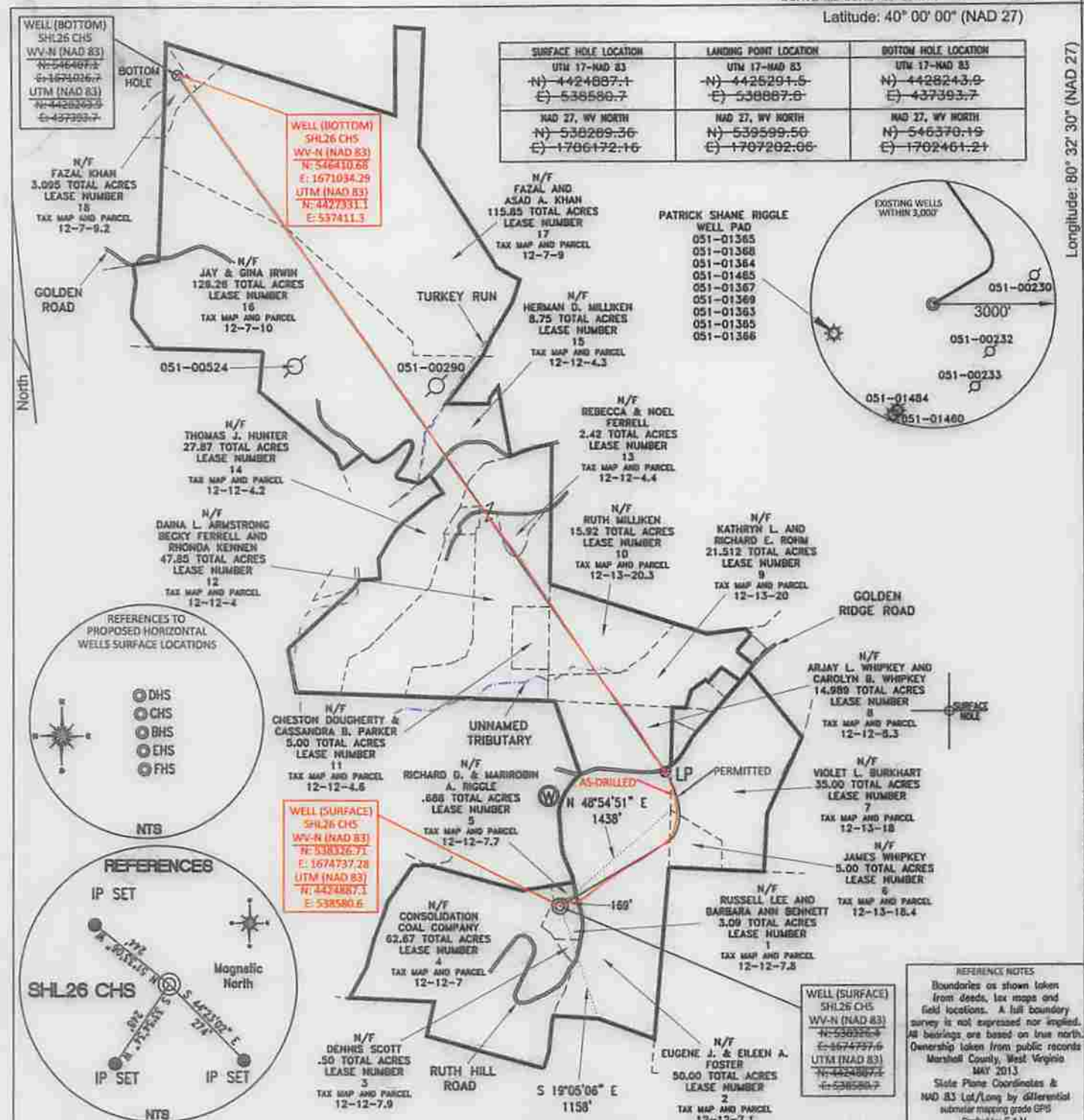
		Alcohols, C14-C15, ethoxylated	58951-67-7		0.00021
	Other Ingredient(s)				
		Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	58527-49-1		0.00021
	Other Ingredient(s)				
		Oxyalkylated phenolic resin	Confidential		0.00014
	Other Ingredient(s)				
		Proprietary Component	Confidential		0.00008
	Other Ingredient(s)				
		Olefins	Confidential		0.00004
	Other Ingredient(s)				
		Olefins	Confidential		0.00004
	Other Ingredient(s)				
		Olefins	Confidential		0.00001
	Other Ingredient(s)				
		Olefins	Confidential		0.00001

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

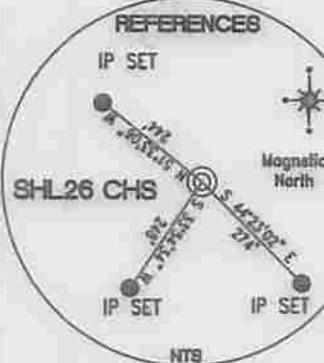
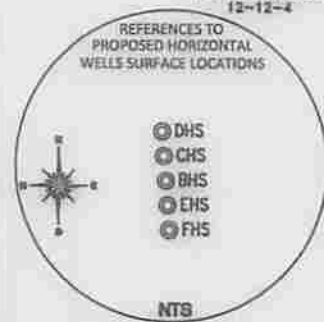
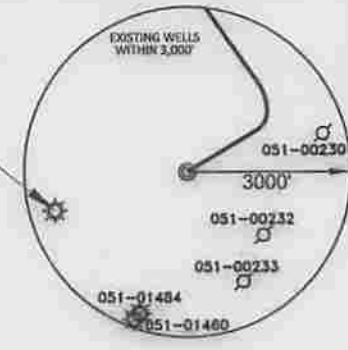
** Information is based on the maximum potential for concentration and thus the total may be over 100%

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)

51.01660



SURFACE HOLE LOCATION	LANDING POINT LOCATION	BOTTOM HOLE LOCATION
UTM 17-NAD 83 N) 4424887.1 E) 538588.7	UTM 17-NAD 83 N) 4425291.5 E) 538887.6	UTM 17-NAD 83 N) 4428243.9 E) 437393.7
NAD 27, WV NORTH N) 538289.36 E) 1786172.16	NAD 27, WV NORTH N) 539599.50 E) 1787202.66	NAD 27, WV NORTH N) 546370.19 E) 1782461.21



REFERENCE NOTES
Boundaries as shown taken from deeds, tax 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 Marshall County, West Virginia MAY 2013
State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS
Drafted by E.A.M.

FILE #: NOB 002
DRAWING #: 2218
SCALE: PLAT - 1" = 1400'
TICK MARK - 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING 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: *[Signature]*
L.I.S. #2124 : Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304
Well Type: Oil Waste Diposal Production Deep
 Gas Liquid Injection Storage Shallow
WATERSHED: WHEELING CREEK
COUNTY/DISTRICT: MARSHALL / SANDHILL
SURFACE OWNER: RUSSELL LEE AND BARBARA ANN BENNETT
OIL & GAS ROYALTY OWNER: JAMES O. WHIPKEY ET AL
LEASE NUMBERS: _____
DATE: AUGUST 8, 2014
OPERATOR'S WELL #: SHL26 CHS AS-DRILLED
API WELL #: 47 51 01660
STATE COUNTY PERMIT
ELEVATION: 1,320'
QUADRANGLE: MAJORSVILLE WV-PA
ACREAGE: 3.09 +/-
ACREAGE: 477.606 +/- 09/19/2014
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
WELL OPERATOR: NOBLE ENERGY, INC.
ADDRESS: 333 TECHNOLOGY DRIVE SUITE 116
CITY: CANONSBURG STATE: PA ZIP CODE: 15317
ESTIMATED DEPTH: TVD: 6,698' TMD: 15,844'
DESIGNATED AGENT: STEVEN M. GREEN
ADDRESS: 500 VIRGINIA STREET EAST
CITY: CHARLESTON STATE: WV ZIP CODE: 25301