

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

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

API 47-095-02852 County Tyler District McElroy
Quad Shirley 7 1/2" Pad Name RPT8 Field/Pool Name _____
Farm name Jack & Jeffrey Hair Well Number RPT8-6
Operator (as registered with the OOG) 24610
Address 429 Simonton Road City Ellenboro State WV Zip 26346

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4370424.36 Easting 518400.65
Landing Point of Curve Northing 4370531.09 Easting 518040.64
Bottom Hole Northing 4373019.27 Easting 517235.95

Elevation (ft) 1,247.2' 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 (SOBM), K-49 (Base Oil), Barite, Anco Mul P, Anco Mul OW, Anco Mul XL, Anco Mul Mod
Anco Mul OW Claytone 3, Lime, Calcium Chloride Powder, Phalt S, Mica, Cal-Carb

Date permit issued 3/13/2023 Date drilling commenced 5/10/2023 Date drilling ceased 10/19/2023
Date completion activities began 1/12/2024 Date completion activities ceased 2/8/2024
Verbal plugging (Y/N) N Date permission granted n/a Granted by n/a

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

Freshwater depth(s) ft 215' 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 n/a Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

12/13/2024

API 47- 095 - 02852 Farm name Jack & Jeffrey Hair Well number RPT8-6

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	24"	18.625"	30'	New	n/a	n/a	Grouted
Surface	17.5"	13.375"	434'	New	48# H-40	42'	Yes
Coal							
Intermediate 1	11"	8.625"	2,468'	New	24# J-55	369'	Yes
Intermediate 2							
Intermediate 3							
Production	7.875"	5.5"	15,959'	New	20# P-110	n/a	Yes
Tubing							
Packer type and depth set		n/a					

Comment Details Surface CTS with 20% OH excess / Intermediate CTS with 30% OH excess / Production CTS with 5% OH excess

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	Class A	n/a	n/a	n/a	n/a	CTS	8 hours
Surface	Class A	358	15.6	1.19	409	CTS	8 hours
Coal							
Intermediate 1	Class A	743	15.6	1.19	880	CTS	8 hours
Intermediate 2							
Intermediate 3							
Production	Class A	2497	14.5	1.18	2934	1,566'	8 hours
Tubing							

Drillers TD (ft) 15,989'

Loggers TD (ft) 7,206'

Deepest formation penetrated Marcellus

Plug back to (ft) n/a

Plug back procedure n/a

RECEIVED
Office of Oil and Gas

Kick off depth (ft) 6,376'

OCT 9 2024

Check all wireline logs run

☐ caliper ☐ density ☒ deviated/directional ☐ induction
☐ neutron ☐ resistivity ☒ gamma ray ☐ temperature

WV Department of
Environmental Protection
Esonic

Well cored ☐ Yes ☒ No

Conventional Sidewall

Were cuttings collected ☒ Yes ☐ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

Prod. 5.5" x 7.375" Innovex Optimizer Centralizer, 1 every other joint in the lateral from TD to the top of tangent section/5.5" x 7.375" Innovex Optimizer Centralizer every 2nd joint to 200' inside Int./ 5.5" x 7.875" Bow Centralizer every 5 joints to surface
Int. 8-5/8" Hinged Centralizer - every third joint - 8-5/8" Centralizing Baskets one near top and bottom
Surface 13-3/8" Hinged Centralizer - every other joint Centralizing Basket on top joint

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

12/13/2024

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus Shale (landing point)	6,898'	TVD 7,449'
Marcellus Shale (bottom hole)	6,850'	15,959'

GAS TEST				☐ Build up		☐ Drawdown		☒ Open Flow		OIL TEST				☒ Flow		☐ Pump	
SHUT-IN PRESSURE		Surface		2993		psi		Bottom Hole		2993		psi		DURATION OF TEST 24 hrs			
OPEN FLOW		Gas		Oil		NGL		Water		GAS MEASURED BY		☐ Estimated		☒ Orifice		☐ Pilot	
		13500.0		mcfpd		440 bpd		0 bpd		192 bpd							

[illegible]

Drilling Contractor	Precision Drilling			
Address	10350 Richmond Ave, Suite 700	City	Houston	State TX Zip 77042
Logging Company	Raptor Consulting			
Address	80 Emerson Lane	City	Bridgeville	State PA Zip 15017
Cementing Company	American Cementing			
Address	1213 Stonecreek Road	City	New Philidelphia	State OH Zip 44663
Stimulating Company	Universal Pressure Pumping Inc.			
Address	2198 University Drive	City	Lemont Furnace	State PA Zip 15456
Please insert additional pages as applicable.				

Completed by Andrew Neill, filed by Emily Potesta Telephone (740) 885-9635
Signature  Title Drilling Manager Date 10/2/24

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

12/13/2024

WR-35

REV.8/23/13

Page 1 of 3

API# 47-095-02852

FARM NAME:

WELL NAME: RPT8-6

PERFORATION RECORD					
		Perforated from	Perforated To	Number of	
STAGE#	Perforation Date	MD FT.	MD FT.	Perforations	Formation
1	1/12/2024	15,877	15,922	40	Marcellus
2	1/12/2024	15,677	15,837	40	Marcellus
3	1/12/2024	15,477	15,637	40	Marcellus
4	1/13/2024	15,277	15,437	40	Marcellus
5	1/13/2024	15,077	15,237	40	Marcellus
6	1/14/2024	14,877	15,037	40	Marcellus
7	1/14/2024	14,677	14,837	40	Marcellus
8	1/14/2024	14,477	14,637	40	Marcellus
9	1/30/2024	14,277	14,437	40	Marcellus
10	1/30/2024	14,077	14,237	40	Marcellus
11	1/30/2024	13,877	14,037	40	Marcellus
12	1/30/2024	13,677	13,837	40	Marcellus
13	1/31/2024	13,477	13,637	40	Marcellus
14	1/31/2024	13,277	13,437	40	Marcellus
15	1/31/2024	13,077	13,237	40	Marcellus
16	2/1/2024	12,877	13,037	40	Marcellus

Stimulation information Per Stage

STAGE#	Stimulation Date	Average Rate (BPM)	Average Treatment Pressure	Max Breakdown Pressure	ISIP Pressure	Amount of Propan (lbs)	Amount of Water (bbls)
1	1/12/2024	72	7772	5772	3,669.00	248,500	9,926
2	1/12/2024	85	7913	5602	3,967.00	392,500	8,458
3	1/13/2024	85	7782	5792	5,165.00	399,900	8,794
4	1/13/2024	87	7793	5929	5,353.00	400,000	8,243
5	1/13/2024	89	7782	5662	4,918.00	403,700	7,692
6	1/14/2024	87	7804	6135	5,015.00	400,400	8,589
7	1/14/2024	87	7756	6195	4,815.00	401,800	8,147
8	1/14/2024	87	7599	5906	5,073.00	401,500	7,968
9	1/30/2024	91	7744	5784	5,130.00	400,500	7,984
10	1/30/2024	91	7699	5977	5,331.00	401,800	7,928
11	1/30/2024	91	7552	3985	4,898.00	399,800	8,523
12	1/31/2024	91	7768	5121	4,833.00	400,400	8,190
13	1/31/2024	90	7740	5692	5,250.00	399,900	8,197
14	1/31/2024	90	7619	5747	5,339.00	400,400	8,321
15	1/31/2024	89	7724	5381	5,204.00	400,300	8,336
16	2/1/2024	91	7618	5768	4,966.00	400,600	8,446

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

12/13/2024

WR-35

REV.8/23/13

Page 2 of 3

API#47-095-02852

FARM NAME:

WELL NAME: RPT8-6

PERFORATION RECORD

STAGE#	Perforation Date	Perforated from	Perforated To	Number of	Formation
		MD FT.	MD FT.	Perforations	
17	2/1/2024	12,677	12,837	40	Marcellus
18	2/1/2024	12,477	12,637	40	Marcellus
19	2/2/2024	12,277	12,437	40	Marcellus
20	2/2/2024	12,077	12,237	40	Marcellus
21	2/2/2024	11,877	12,037	40	Marcellus
22	2/2/2024	11,677	11,837	40	Marcellus
23	2/3/2024	11,477	11,637	40	Marcellus
24	2/3/2024	11,277	11,437	40	Marcellus
25	2/3/2024	11,077	11,237	40	Marcellus
26	2/3/2024	10,877	11,037	40	Marcellus
27	2/4/2024	10,677	10,837	40	Marcellus
28	2/4/2024	10,477	10,637	40	Marcellus
29	2/4/2024	10,277	10,437	40	Marcellus
30	2/5/2024	10,077	10,237	40	Marcellus
31	2/5/2024	9,877	10,037	40	Marcellus
32	2/5/2024	9,677	9,837	40	Marcellus

Stimulation information Per Stage

STAGE#	Stimulation Date	Average Rate (BPM)	Average Treatment Pressure	Max Breakdown Pressure	ISIP Pressure	Amount of Propant (lbs)	Amount of Water (bbls)
17	2/1/2024	93	7820	6212	5007	401,300	8,397
18	2/1/2024	92	7529	5205	5346	402,400	8,339
19	2/1/2024	91	7606	5999	4903	400,100	7,994
20	2/2/2024	91	7504	5195	4980	400,900	7,735
21	2/2/2024	91	7515	5202	5734	399,900	7,715
22	2/2/2024	92	7401	5692	5184	400,500	7,859
23	2/3/2024	91	7343	5937	5201	400,300	7,902
24	2/3/2024	91	7571	6201	5114	400,800	7,645
25	2/3/2024	91	7224	6400	5265	399,700	7,612
26	2/4/2024	91	7254	5469	4765	400,400	7,786
27	2/4/2024	92	7348	5394	5308	402,400	7,762
28	2/4/2024	91	7318	5615	5292	400,700	7,679
29	2/4/2024	91	7319	6051	4878	400,600	7,617
30	2/5/2024	91	7167	5383	4906	400,500	7,432
31	2/5/2024	91	7068	5643	4835	400,100	7,469
32	2/5/2024	91	7064	5500	5057	400,000	7,353

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

12/13/2024

WR-35

REV.8/23/13

Page 3 of 3

API#47-095-02852

FARM NAME:

RPT8-6

PERFORATION RECORD

		Perforated from	Perforated To	Number of	
STAGE#	Perforation Date	MD FT.	MD FT.	Perforations	Formation
33	2/5/2024	9,477	9,637	40	Marcellus
34	2/5/2024	9,277	9,437	40	Marcellus
35	2/6/2024	9,077	9,237	40	Marcellus
39	2/6/2024	8,877	9,037	40	Marcellus
37	2/6/2024	8,677	8,837	40	Marcellus
38	2/6/2024	8,477	8,637	40	Marcellus
39	2/7/2024	8,277	8,437	40	Marcellus
40	2/7/2024	8,077	8,237	40	Marcellus
41	2/7/2024	7,877	8,037	40	Marcellus
42	2/8/2024	7,677	7,837	40	Marcellus
43	2/8/2024	7,477	7,637	40	Marcellus
44	2/8/2024	7,277	7,437	40	Marcellus

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

Stimulation information Per Stage

STAGE#	Stimulation Date	Average Rate (BPM)	Average Treatment Pressure	Max Breakdown Pressure	ISIP Pressure	Amount of Propan (lbs)	Amount of Water (bbls)
33	2/5/2024	90	7,059.00	5,907.00	5,222.00	399,800	7,353
34	2/6/2024	90	7,064.00	5,196.00	5,292.00	400,300	7,508
35	2/6/2024	90	7,021.00	5,602.00	5,425.00	400,500	7,559
39	2/6/2024	92	6,994.00	6,223.00	4,699.00	400,400	7,650
37	2/6/2024	90	7,018.00	6,092.00	5,309.00	400,200	7,748
38	2/7/2024	91	6,909.00	5,529.00	4,845.00	400,100	7,408
39	2/7/2024	90	7,079.00	6,047.00	4,934.00	400,700	8,324
40	2/7/2024	91	6,948.00	6,485.00	5,065.00	402,600	7,466
41	2/7/2024	91	6,908.00	6,162.00	5,276.00	401,800	7,515
42	2/8/2024	90	6,713.00	6,104.00	4,884.00	402,500	7,331
43	2/8/2024	90	6,768.00	5,327.00	5,472.00	402,500	7,228
44	2/8/2024	90	6,684.00	6,149.00	5,013.00	401,000	7,135
						0	0
						0	0
						0	0
						0	0

12/13/2024

Fracture Start Date/Time:	1/12/24 13:46
Fracture End Date/Time:	2/8/24 11:26
State:	WV
County:	Tyler
API Number:	47-095-02852-0000
Operator Number:	
Well Name:	6H
Federal Well:	No
Indian Well:	No
Longitude:	-80.786039
Latitude:	39.483224
Long/Lat Projection:	NAD83
True Vertical Depth (TVD):	6,642'
Total Clean Fluid Volume* (gal):	14,757,540
Water Source Type	Groundwater < 1000 TDS
Percentage of Source	100
Well Type	GAS



	gal
	lb
	lb
	gal
	gal
	gal
	gal
	gal

Ingredients Section:							Total Slurry Mass (Lbs)		
							141,646,476		
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Mass per Component (LBS)	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments	
Water	Operator	Carrier Fluid	Water	7732-18-5	100.00%	123,151,671	86.94298%		
40/70 Mesh	NexTier Completions Solutions	Propping Agent	Crystalline Silica	14808-60-7	99.90%	12,118,669	8.55557%		
15% HCl	NexTier Completions Solutions	Acid	Water	7732-18-5	85.00%	865,997	0.61138%		
15% HCl	NexTier Completions Solutions	Acid	Hydrochloric Acid	7647-01-0	15.00%	152,823	0.10789%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Ethylene glycol	107-21-1	45.00%	443	0.00031%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Glycol Ether EB	111-76-2	45.00%	443	0.00031%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	N,N-Dimethylformamide	68-12-2	20.00%	197	0.00014%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Tar bases,quinoline derivs.,benzyl chloride-quaternized	72480-70-7	20.00%	197	0.00014%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Nonylphenol ethoxylated	127087-87-0	10.00%	98	0.00007%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Cinnamaldehyde	104-55-2	10.00%	98	0.00007%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Alcohols, C6-12	68603-15-6	10.00%	98	0.00007%		
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Water	7732-18-5	15.00%	148	0.00010%		

[illegible]

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection



Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**
Water	Operator	Carrier Fluid	Water	7732-18-5	100.00%
10% HCl	NexTier Completions Solutions	Acid	Water	7732-18-5	90.00%
10% HCl	NexTier Completions Solutions	Acid	Hydrochloric Acid	7647-01-0	10.00%
100 Mesh	NexTier Completions Solutions	Propping Agent	Crystalline Silica	14808-60-7	99.90%
40/70 Mesh	NexTier Completions Solutions	Propping Agent	Crystalline Silica	14808-60-7	99.90%
15% HCl	NexTier Completions Solutions	Acid	Water	7732-18-5	85.00%
15% HCl	NexTier Completions Solutions	Acid	Hydrochloric Acid	7647-01-0	15.00%
15WF766	Nalco Champion	Friction Reducer	Oxyalkylated Alcohol	Proprietary	5.00%
15WF766	Nalco Champion	Friction Reducer	Hydrotreated Light Distillate	64742-47-8	30.00%
15WF766	Nalco Champion	Friction Reducer	Ethoxylated Sorbitan Monooleate	9005-65-6	5.00%
15WF766	Nalco Champion	Friction Reducer	Ammonium Chloride	12125-02-9	5.00%
20% KCl	Anchor	Clay Control	Water	7732-18-5	80.00%
20% KCl	Anchor	Clay Control	Potassium Chloride	7447-40-7	20.00%
20/40 Mesh	NexTier Completions Solutions	Propping Agent	Titanium Dioxide	13463-67-7	0.10%
20/40 Mesh	NexTier Completions Solutions	Propping Agent	Silica, crystalline quartz	14808-60-7	98.70%
20/40 Mesh	NexTier Completions Solutions	Propping Agent	Iron Oxide	1309-37-1	0.10%
20/40 Mesh	NexTier Completions Solutions	Propping Agent	Aluminum Oxide	1344-28-1	1.10%
2000 PTW	Economy Polymers	Water Gelling Agent	Guar Gum	9000-30-0	100.00%
25% Sodium Hydroxide	Shrieve	Activator	Water	7732-18-5	81.00%
25% Sodium Hydroxide	Shrieve	Activator	Sodium Hydroxide	1310-73-2	26.00%
28% HCl	NexTier Completions Solutions	Hydrochloric Acid	Water	7732-18-5	70.00%
28% HCl	NexTier Completions Solutions	Hydrochloric Acid	Hydrochloric Acid	7647-01-0	30.00%
30/50 Arizona Sand	NexTier Completions Solutions	Propping Agent	Quartz	14808-60-7	100.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024

WV Department of
Environmental Protection

30/50 RCS	NexTier Completions Solutions	Propping Agent	Quartz	14808-60-7	98.00%
30/50 RCS	NexTier Completions Solutions	Propping Agent	Polyurethane Resin	57029-46-6	2.00%
40/140 Mesh	NexTier Completions Solutions	Propping Agent	Quartz	14808-60-7	99.90%
40/70 Mesh RCS	NexTier Completions Solutions	Propping Agent	Polyurethane Resin	57029-46-6	2.00%
40/70 Mesh RCS	NexTier Completions Solutions	Propping Agent	Crystalline Silica	14808-60-7	98.00%
7.5% HCl	NexTier Completions Solutions	Acid	Water	7732-18-5	85.00%
7.5% HCl	NexTier Completions Solutions	Acid	Hydrochloric Acid	7647-01-0	15.00%
AC100	Aegis	Biocide	Water	7732-18-5	85.00%
AC100	Aegis	Biocide	15% Hydrochloric Acid	7641-01-0	15.00%
AC-100	Astro-Chem Lab, Inc	Corrosion inhibitor	Water	7732-18-5	75.00%
AC-100	Astro-Chem Lab, Inc	Corrosion inhibitor	Propargyl Alcohol	107-19-7	15.00%
AC-100	Astro-Chem Lab, Inc	Corrosion inhibitor	Methanol	67-56-1	10.00%
AC-100	Astro-Chem Lab, Inc	Corrosion inhibitor	Isopropanol	67-63-0	1.00%
AC200	Aegis	Biocide	Water	7732-18-5	75.00%
AC200	Aegis	Biocide	Sodium Hypochlorite	007681-52-9	13.00%
AC200	Aegis	Biocide	Sodium Hydroxide	001310-73-2	2.00%
AC200	Aegis	Biocide	Sodium Chloride	007647-14-5	10.00%
AC300	Aegis	Biocide	Water	7732-18-5	60.00%
AC300	Aegis	Biocide	Sodium Chlorite	7758-19-2	35.00%
AC300	Aegis	Biocide	Sodium Chloride	7647-14-5	5.00%
AceFlow 3300	NexTier Completions Solutions	FRICTION REDUCER	STYRENE-ETHYLENE/PROPYLENE-(STYRENE)(SEP(S))	68648-89-5	5.00%
AceFlow 3300	NexTier Completions Solutions	FRICTION REDUCER	POLYACRYLAMIDE	9003-05-8	30.00%
AceFlow 3300	NexTier Completions Solutions	FRICTION REDUCER	FATTY ACID ESTER	Proprietary	5.00%
AceFlow 3300	NexTier Completions Solutions	FRICTION REDUCER	DISTILLATES, C8-26, BRANCHED AND LINEAR	848301-67-7	60.00%
ACI-100	ACE COMPLETIONS	ACID INHIBITOR	PYRIDINE, ALKYL DERIVS	68391-11-7	10.00%
ACI-100	ACE COMPLETIONS	ACID INHIBITOR	MONOETHYLENE GLYCOL	107-21-1	75.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

ACI-100	ACE COMPLETIONS	ACID INHIBITOR	ALKYL (C12-C14-SECONDARY) ALCOHOL, ETHOXYLATED	84133-50-6	5.00%
ACI-100	ACE COMPLETIONS	ACID INHIBITOR	3-FENYLPROPENAL	104-55-2	10.00%
ADM-190	Astro-Chem Lab, Inc	Iron control	Xylene	1330-20-7	7.00%
ADM-190	Astro-Chem Lab, Inc	Iron control	Water	7732-18-5	92.00%
ADM-190	Astro-Chem Lab, Inc	Iron control	Isopropanol	67-63-0	1.00%
ADM-190	Astro-Chem Lab, Inc	Iron control	Ethylbenzene	100-41-4	2.00%
AIC100D	Nalco	Iron Control	Citric Acid	77-92-9	100.00%
Alpha 1427	Baker Hughes	Biocide	Quaternary ammonium compound	68424-85-1	1-5%
Alpha 1427	Baker Hughes	Biocide	Glutaraldehyde	111-30-8	20-30%
Alpha 1427	Baker Hughes	Biocide	Ethanol	64-17-5	1-5%
Alpha 1427	Baker Hughes	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	5-10%
Alpha 452	Baker Hughes	Biocide	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	60.00%
Alpha 452	Baker Hughes	Biocide	Phosphaonates	Proprietary	40.00%
Ammonium Persulfate	Chemplex	Breaker	Ammonium Persulfate	7727-54-0	98.00%
Antimicrobial 220	Frac-Chem	Biocide	Quaternary Ammonium Compounds, Benxyl-c12-c16-alkyldimethyl, chlorides	68424-85-1	2.00%
Antimicrobial 220	Frac-Chem	Biocide	Glutaraldehyde	111-30-8	15.00%
Antimicrobial 220	Frac-Chem	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	2.00%
Antimicrobial 221	Frac-Chem	Biocide	Ethanol	64-17-5	2.00%
Antimicrobial 222	Frac-Chem	Biocide	Water	7732-18-5	79.00%
AP Break	Iron Horse Chemicals	Breaker	Ammonium Persulfate	7727-54-0	100.00%
AP Scale 2S	Chemplex	Scale Inhibitor	Polyacrylate Blend	Proprietary	7.00%
AP Scale 2S	Chemplex	Scale Inhibitor	Ethylene Glycol	107-21-1	35.00%
AP Surf 2	Blentech	Surfactant	isopropyl alcohol	67-63-0	45.00%
Bactron K-31	Nalco Champion	Biocide	Water	7732-18-5	75.00%
Bactron K-31	Nalco Champion	Biocide	Glutaraldehyde	111-30-8	25.00%
Bellacide 300	NexTier Completions Solutions	Biocide	Methanol	67-56-1	60.00%
Bellacide 300	NexTier Completions Solutions	Biocide	Tributyltetradecyl phosphonium chloride	81741-28-8	2.78%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

Bellacide 300	NexTier Completions Solutions	Biocide	Poly oxyethylene dimethyliminio ethylene dimethyliminio ethylenedichloride	31512-74-0	2.22%
Bellacide 300W	NexTier Completions Solutions	Biocide	Methanol	67-56-1	60.00%
Bellacide 300W	NexTier Completions Solutions	Biocide	Tributyltetradecyl phosphonium chloride	81741-28-8	2.78%
Bellacide 300W	NexTier Completions Solutions	Biocide	Poly oxyethylene dimethyliminio ethylene dimethyliminio ethylenedichloride	31512-74-0	2.22%
Bio Exp 13-59	Shrieve	Crosslinker	Water	7732-18-5	80.00%
Bio Exp 13-59	Shrieve	Crosslinker	Ethylene Glycol	107-21-1	30.00%
Bio-Add 1200	Shrieve	Clay Control	Water	7732-18-5	15.00%
Bio-Add 1200	Shrieve	Clay Control	Non Haz Salt	Proprietary	75.00%
BIO-ADD 4576	Shrieve	Iron control	Water	7732-18-5	50.00%
BIO-ADD 4576	Shrieve	Iron control	Organic Acid	Proprietary	50.00%
Bio-Add 951	Shrieve	Friction Reducer	Water	7732-18-5	67.00%
Bio-Add 951	Shrieve	Friction Reducer	Sodium Chloride	7647-14-5	1.50%
Bio-Add 951	Shrieve	Friction Reducer	Petroleum Distillate Hydrotreated Light	64742-47-8	30.00%
Bio-Add 951	Shrieve	Friction Reducer	Ammonium chloride	12125-02-9	1.50%
Bio-Add 951	Shrieve	Friction Reducer	2-Propenoic acid, polymer with 2-propenamide	Proprietary	1.50%
BioBalls MR	Santrol	Diverter	Poly lactide Resin	9051-89-2	Trade secret
Bioban 5:10	NexTier Completions Solutions	Biocide	quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	10.00%
Bioban 5:10	NexTier Completions Solutions	Biocide	Glutaral	111-30-8	10.00%
Bioban 5:10	NexTier Completions Solutions	Biocide	Ethanol	64-17-5	3.00%
Bio-Break 1001	Shrieve	Breaker	Diethylene glycol monobutyl ether	112-34-5	5.00%
Bio-Break 1001	Shrieve	Breaker	Ammonium Persulfate	7727-54-0	80.00%
Bio-Break 1002	Shrieve	Breaker	Ammonium Persulfate	7727-54-0	99.00%
Bio-Break 949	Shrieve	Non-emulsifying Agent	Propylene Glycol Ether	Proprietary	70.00%
Bio-Break 949	Shrieve	Non-emulsifying Agent	Naphthalene	91-20-3	1.50%
Bio-Break 949	Shrieve	Non-emulsifying Agent	Alkoxylated alkylphenol formaldehyde resin	Proprietary	28.50%

RECEIVED
Office of Oil and Gas
OCT 9 2024
Wy Department of
Environmental Protection

BIOC11139A	NexTier Completions Solutions	Biocide	Glutaraldehyde	111-30-8	10.00%
BIOC11139A	NexTier Completions Solutions	Biocide	ethanol	64-17-5	5.00%
BIOC11139A	NexTier Completions Solutions	Biocide	benzyl-(C12-C16 alkyl)-dimethyl-ammonium chloride	68424-85-1	30.00%
BIO-COR 1011	Shrieve	Corrosion inhibitor	Propargyl Alcohol	107-19-7	7.50%
BIO-COR 1011	Shrieve	Corrosion inhibitor	Polyoxylalkylenes	Proprietary	20.00%
BIO-COR 1011	Shrieve	Corrosion inhibitor	Olefin	Proprietary	2.50%
BIO-COR 1011	Shrieve	Corrosion inhibitor	Methanol	67-56-1	50.00%
BIO-COR 1011	Shrieve	Corrosion inhibitor	Fatty acids	Proprietary	20.00%
Bio-Cross 109	Shrieve	Crosslinker	Water	7732-18-5	60.00%
Bio-Cross 109	Shrieve	Crosslinker	Solvent naphtha, (petroleum) heavy aliphatic	64742-96-7	65.00%
BIO-CROSS 109M	Shrieve	Crosslinker	Distillates, Petroleum, Hydrotreated Light	64742-47-8	47.5-57.5%
Bio-Exp 13-22	Shrieve	Stabilizer	Water	7732-18-5	71.00%
Bio-Exp 13-22	Shrieve	Stabilizer	Sodium Thiosulfate	7772-98-7	31.00%
Bio-Exp 13-63	Shrieve	Breaker	Sodium Bromate	7789-38-0	70.00%
Bio-Exp 13-63	Shrieve	Breaker	Cured Resin	Proprietary	30.00%
Bio-Exp 14-23	Shrieve	Breaker	Water	7732-18-5	90.00%
Bio-Exp 14-23	Shrieve	Breaker	Sodium Bromate	7789-38-0	20.00%
Bio-Exp 14-8	Shrieve	Water Gelling Agent	Solvent naphtha, (petroleum) heavy aliphatic	64742-96-7	25.00%
Bio-Exp 14-8	Shrieve	Water Gelling Agent	Proprietary non-hazardous polymers	Proprietary	60.00%
Bio-Exp 14-8	Shrieve	Water Gelling Agent	Light Paraffin	64742-55-8	15.00%
Bio-Exp 14-8	Shrieve	Water Gelling Agent	Hydrotreated Petroleum distillate	64742-54-7	15.00%
Bionix GA1203	Iron Horse Chemicals	Biocide	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	3.00%
Bionix GA1203	Iron Horse Chemicals	Biocide	Glutaraldehyde	111-30-8	20.00%
Bionix GA1203	Iron Horse Chemicals	Biocide	Didecyldimethylammonium chloride	7173-51-5	3.00%
BioRCK-1038	NexTier Completions Solutions	Biocide	Quarternary Ammonium Chloride	68424-85-1	10.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

BioRCK-1038	NexTier Completions Solutions	Biocide	Glutaraldehyde	111-30-8	10.00%
BioRCK-1038	NexTier Completions Solutions	Biocide	Ethanol	64-17-5	3.00%
BIO-SCALE 1001	Shrieve	Scale Inhibitor	Water	7732-18-5	80.00%
BIO-SCALE 1001	Shrieve	Scale Inhibitor	Partially Neutralized Sulfonated Copolymer	Proprietary	30.00%
Bonderite	Univar	Acid Additive	Olellyl alcohol ethoxylated	Proprietary	10.00%
Bonderite	Univar	Acid Additive	Fatty acid	Proprietary	30.00%
Bonderite	Univar	Acid Additive	Cyclic amine reaction product with acetophenone and formaldehyde acid salt	Proprietary	10.00%
Bonderite	Univar	Acid Additive	Acetophenone	98-86-2	1.00%
Bonderite	Univar	Acid Additive	1-Propoxy-2-propanol	1569-01-3	30.00%
BPC 68945	Baker Hughes	Biocide	Water	7732-18-5	70.00%
BPC 68945	Baker Hughes	Biocide	Sodium Chlorite	7758-19-2	30.00%
BR1	Economy Polymers	Breaker	Sodium Bromate	7789-38-0	100.00%
Brine Water	Operator	Winterizer	Water	7732-18-5	90.00%
Brine Water	Operator	Winterizer	Sodium Chloride	7647-14-5	30.00%
Brine Water	Operator	Winterizer	Potassium Chloride	7447-40-7	10.00%
Brine Water	Operator	Winterizer	Calcium Chloride	10043-52-4	10.00%
BUSAN 1058	Shrieve	Biocide	Water	7732-18-5	72.00%
BUSAN 1058	Shrieve	Biocide	Tetrahydro-3, 5-dimethyl-2H-1,3,3-thiadiazine-2-thione	533-74-4	24.00%
BUSAN 1058	Shrieve	Biocide	Sodium Hydroxide	1310-73-2	4.00%
CC-9000	Frac-Chem	Clay Control	Water	7732-18-5	30.00%
CC-9000	Frac-Chem	Clay Control	Choline chloride	67-48-1	70.00%
CCT SP Break 300	Crudechem	Breaker	SODIUM METABORATE	10555-76-7	5.00%
CCT SP Break 300	Crudechem	Breaker	Perboric acid (HBO(O2)), sodium salt, tetrahydrate	10486-00-7	97.00%
Chlorine Dioxide	Baker Hughes	Biocide	Chlorine Dioxide	10049-04-4	37.33%
Chlorine Dioxide	Baker Hughes	Biocide	Chlorine Dioxide	7631-90-5	0.85%
Chlorine Dioxide	Baker Hughes	Biocide	Chlorine Dioxide	870-72-4	0.25%
Chlorine Dioxide	Baker Hughes	Biocide	Chlorine Dioxide	7732-18-5	61.56%
Chlorine Dioxide Solution < 5000 ppm	Sabre	Biocide	Water	7732-18-5	99.50%
Chlorine Dioxide Solution < 5000 ppm	Sabre	Biocide	Chlorine Dioxide	10049-04-4	0.50%

RECEIVED

Office of Oil and Gas

OCT 9 2024

Department of
Environmental Protection

CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Ethylene glycol	107-21-1	45.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Glycol Ether EB	111-76-2	45.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	N,N-Dimethylformamide	68-12-2	20.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Tar bases,quinoline derivs.,benzyl chloride-quaternized	72480-70-7	20.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Nonylphenol ethoxylated	127087-87-0	10.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Cinnamaldehyde	104-55-2	10.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Alcohols, C6-12	68603-15-6	10.00%
CIA-12	NexTier Completions Solutions	Acid corrosion inhibitor	Water	7732-18-5	15.00%
Citric Acid	Univar	Acid Additive	Water	7732-18-5	65.00%
Citric Acid	Univar	Acid Additive	Citric Acid	77-92-9	50.00%
CL-650	Frac-Chem	Crosslinker	Water	7732-18-5	60.00%
CL-650	Frac-Chem	Crosslinker	Ethylene Glycol	107-21-1	40.00%
Clayplex 650	Chemplex	Clay Control	Water	7732-18-5	55.00%
Clayplex 650	Chemplex	Clay Control	Ethananminium, 2-hydroxy-N, N, N-trimethyl-, chloride	67-48-1	35.00%
ClaySeal 70	Crudechem	Clay Stabilzer	Quaternary Ammonium Salt Blend	Proprietary	100.00%
Clearal 267	NexTier Completions Solutions	Biocide	Glutaraldehyde	111-30-8	8.00%
Clearal 267	NexTier Completions Solutions	Biocide	Alkyl dimethyl benzyl ammonium chloride	68391-01-5	2.00%
Clearal 267	NexTier Completions Solutions	Biocide	Water	7732-18-5	90.00%
Clearal 268	Chemstream	Biocide	Glutaraldehyde	111-30-8	20.00%
Clearal 268	Chemstream	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	3.00%
Clearal 268	Chemstream	Biocide	Quaternary Ammonium Compounds	68424-85-1	3.00%
Clearal 268	Chemstream	Biocide	Ethanol	64-17-5	1.50%
Clearal 268	Chemstream	Biocide	Water	7732-18-5	80.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

Clearal 270a	NexTier Completions Solutions	Biocide	Glutaraldehyde	111-30-8	30.00%
Clearal 270a	NexTier Completions Solutions	Biocide	Didecyldimethylammonium Chloride	7173-51-5	10.00%
Clearal 270a	NexTier Completions Solutions	Biocide	Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides	68424-85-1	10.00%
Clearal 270a	NexTier Completions Solutions	Biocide	Ethanol	64-17-5	5.00%
CLO2	Crudechem	Biocide	Water	7732-18-5	39.50%
CLO2	Crudechem	Biocide	Sodium chlorite	7758-19-2	26.00%
CLO2	Crudechem	Biocide	Sodium Chloride	7647-14-5	3.00%
CLO2	Crudechem	Biocide	Hydrochloric Acid	7647-01-0	31.50%
CoolSet	Fairmount Santrol	Propping Agent	Phenol-formaldehyde Novolak Resin	9003-35-4	5.00%
CoolSet	Fairmount Santrol	Propping Agent	Crystalline Silica (quartz)	14808-60-7	99.50%
CorrSorb 3600	Baker Hughes	Corrosion inhibitor	Quaternary Ammonium Compound	61789-71-7	30.00%
CorrSorb 3600	Baker Hughes	Corrosion inhibitor	Ethylene Glycol	107-21-1	1.00%
CorrSorb 3600	Baker Hughes	Corrosion inhibitor	Crystalline Silica: Quartz	14808-60-7	1.00%
CorrSorb 3600	Baker Hughes	Corrosion inhibitor	Acid Phosphate Ester	9046-01-9	10.00%
CRS 1080G	ChemEOR	Non-emulsifying Agent	Water	7732-18-5	55.00%
CRS 1080G	ChemEOR	Non-emulsifying Agent	Surfactants	Proprietary	35.00%
CRS 1080G	ChemEOR	Non-emulsifying Agent	Ethanol	64-17-5	10.00%
CS 4200	Chevron	Surfactant	01154100-5347P	Trade Secret (Component 2)	30.00%
CS 4200	Chevron	Surfactant	01154100-5346P	Trade Secret (Component 1)	45.00%
DDAC	Finoric	Biocide	Ethanol	64-17-5	40.00%
DDAC	Finoric	Biocide	Didecyldimethyl Ammonium Chloride	7173-51-5	60.00%
Div. + 1357	Diverter Plus	Diverter	Polyactide Resin	9051-89-2	98.00%
Div. + 1370	Diverter Plus	Diverter	Polyactide Resin	9051-89-2	98.00%
Diverter Plus 1357	Diverter Plus	Diverter	Polyactide Resin	9051-89-2	98.00%
Diverter Plus 1370	Diverter Plus	Diverter	Polyactide Resin	9051-89-2	98.00%
DMUL 150	Iron Horse Chemicals	Non-emulsifying Agent	Isopropyl alcohol	67-63-0	10.00%
DMUL 150	Iron Horse Chemicals	Non-emulsifying Agent	Alcohol Ethoxylate	68439-46-3	10.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

U.S. Department of
Environmental Protection

DMUL 150	Iron Horse Chemicals	Non-emulsifying Agent	2-Propenoic acid, polymer with 4-(1,1-dimethylethyl)phenol, formaldehyde, 2,5-furandione, methyloxirane, 4-nonylphenol and oxira	129828-31-5	10.00%
Econo DF-1	Economy Polymers	Defoamer	Organic Dispersant	Proprietary	100.00%
Econo-398	Economy Polymers	Biocide	Tetrahydro-3, 5-dimethyl-2H-1,3,3-thiadiazine-2-thione	533-74-4	98.00%
Econo-B648L	Economy Polymers	Biocide	Water	7732-18-5	72.00%
Econo-B648L	Economy Polymers	Biocide	Tetrahydro-3, 5-dimethyl-2H-1,3,3-thiadiazine-2-thione	533-74-4	24.00%
Econo-B648L	Economy Polymers	Biocide	Sodium Hydroxide	1310-73-2	4.00%
EconoCap-BR	Economy Polymers	Breaker	Sodium Bromate	7789-38-0	75.00%
EconoCap-BR	Economy Polymers	Breaker	Resin Compound	Proprietary	15.00%
EconoCap-BR	Economy Polymers	Breaker	Crystalline Silica	14808-60-7	10.00%
EconoCap-HP	Economy Polymers	Breaker	Resin Compound	Proprietary	15.00%
EconoCap-HP	Economy Polymers	Breaker	Crystalline Silica	14808-60-7	10.00%
EconoCap-HP	Economy Polymers	Breaker	Ammonium Persulfate	7727-54-0	75.00%
Econo-CI200	Economy Polymers	Corrosion inhibitor	Water	7732-18-5	10.00%
Econo-CI200	Economy Polymers	Corrosion inhibitor	Methanol	67-56-1	80.00%
Econo-CI200	Economy Polymers	Corrosion inhibitor	Fatty Acids	Proprietary	10.00%
Econo-CS35	Economy Polymers	Activator	Water	7732-18-5	80.00%
Econo-CS35	Economy Polymers	Activator	Sodium Hydroxide	1310-73-2	35.00%
Econo-FR300	Economy Polymers	Friction Reducer	Mineral Oil	64742-47-8	25.00%
Econo-FR300	Economy Polymers	Friction Reducer	Acrylamide and Acrylic Acid Copolymer	25987-30-8	30.00%
Econo-FR400	Economy Polymers	Friction Reducer	Water	7732-18-5	40.00%
Econo-FR400	Economy Polymers	Friction Reducer	Sorbitan Monooleate	1338-43-8	2.00%
Econo-FR400	Economy Polymers	Friction Reducer	Phosphate Esters of Alcohol Ethoxylate	68585-36-4	2.00%
Econo-FR400	Economy Polymers	Friction Reducer	Mineral Oil	64742-47-8	25.00%
Econo-FR400	Economy Polymers	Friction Reducer	Ammonium Chloride	12125-02-9	2.00%
Econo-FR400	Economy Polymers	Friction Reducer	Acrylamide and Acrylic Acid Copolymer	25987-30-8	30.00%
Econo-Max	Economy Polymers	Clay Stabilizer	Water	7732-18-5	40.00%
Econo-Max	Economy Polymers	Clay Stabilizer	Choline chloride	67-48-1	60.00%
Ecopol Breaker-BRL	Economy Polymers	Breaker	Water	7732-18-5	90.00%
Ecopol Breaker-BRL	Economy Polymers	Breaker	Sodium Bromate	7789-38-0	10.00%

RECEIVED
2024

OCT 9 2024

Department of
Environmental Protection

Ecopol DBXL-90	Economy Polymers	Crosslinker	Ulexite	1319-33-1	50.00%
Ecopol DBXL-90	Economy Polymers	Crosslinker	Petroleum Distillates (Mineral Oil)	64742-47-8	55.00%
Ecopol DBXL-90	Economy Polymers	Crosslinker	Organophilic Clay	68953-58-2	3.00%
Ecopol DBXL-90	Economy Polymers	Crosslinker	Ethoxylated Alcohol	9043-30-5	3.00%
Ecopol Gelbreak-EL2X	Economy Polymers	Breaker	Water	7732-18-5	70.00%
Ecopol Gelbreak-EL2X	Economy Polymers	Breaker	Sodium Chloride	7647-14-5	20.00%
Ecopol Gelbreak-EL2X	Economy Polymers	Breaker	Hemicellulase Enzyme	Proprietary	10.00%
Ecopol-2000	Economy Polymers	Water Gelling Agent	Guar Gum	9000-30-0	100.00%
Ecopol-2000LMS	Economy Polymers	Water Gelling Agent	Petroleum Distillates (Mineral Oil)	64742-47-8	55.00%
Ecopol-2000LMS	Economy Polymers	Water Gelling Agent	Organophilic Clay	68953-58-2	3.00%
Ecopol-2000LMS	Economy Polymers	Water Gelling Agent	Guar Gum	9000-30-0	50.00%
Ecopol-2000LMS	Economy Polymers	Water Gelling Agent	Ethoxylated Alcohol	9043-30-5	0.50%
Ecopol-EC101	Economy Polymers	Crosslinker	Water	7732-18-5	30.00%
Ecopol-EC101	Economy Polymers	Crosslinker	Sodium Hydroxide	1310-73-2	10.00%
Ecopol-EC101	Economy Polymers	Crosslinker	Potassium Metaborate	13709-94-9	25.00%
Ecopol-EC101	Economy Polymers	Crosslinker	Potassium Hydroxide	1310-58-3	10.00%
Ecopol-EC101	Economy Polymers	Crosslinker	Ethylene Glycol	107-21-1	55.00%
Ecopol-FEAC	Economy Polymers	Iron control	Citric Acid	77-92-9	40.00%
Ecopol-FEAC	Economy Polymers	Iron control	Acetic Acid	64-19-7	60.00%
Ecopol-HTSL	Economy Polymers	Temperature Stabilizer	Water	7732-18-5	70.00%
Ecopol-HTSL	Economy Polymers	Temperature Stabilizer	Sodium Thiosulfate	7772-98-7	40.00%
Ecopol-ME100	Economy Polymers	Surfactant	Water	7732-18-5	25.00%
Ecopol-ME100	Economy Polymers	Surfactant	Triethylene Glycol	112-27-6	25.00%
Ecopol-ME100	Economy Polymers	Surfactant	Methanol	64-17-5	25.00%
Ecopol-ME100	Economy Polymers	Surfactant	Coconut Diethanolamide	68603-42-9	50.00%
Ecopol-NE601	Economy Polymers	Non-emulsifying Agent	Water	7732-18-5	30.00%
Ecopol-NE601	Economy Polymers	Non-emulsifying Agent	Triethylene Glycol	112-27-6	15%
Ecopol-NE601	Economy Polymers	Non-emulsifying Agent	Methanol	64-17-5	50.00%
Ecopol-NE601	Economy Polymers	Non-emulsifying Agent	Coconut Diethanolamide	68603-42-9	25.00%
Ecopol-SI2000	Economy Polymers	Scale Inhibitor	Ethylene Glycol	107-21-1	40.00%
EnviroSurf 6	DCS	Surfactant	Water	7732-18-5	75.00%
EnviroSurf 6	DCS	Surfactant	Limonene	5989-27-5	1.25%
FE-55	ACE COMPLETIONS	IRON CONTROL	CITRIC ACID	77-92-9	40.00%
FE-55	ACE COMPLETIONS	IRON CONTROL	ACETIC ACID	64-19-7	60.00%
Finicide GQ 510	Finoric	Biocide	quaternary ammonium compounds, benzyl-C12- C16-alkyldimethyl, chlorides	68424-85-1	10.00%
Finicide GQ 510	Finoric	Biocide	Methanol	67-56-1	2.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

Finicide GQ 510	Finoric	Biocide	Glutaraldehyde	111-30-8	5.00%
FR-1000	Rockwater	Friction Reducer	Other Components Below Reportable Levels		75.00%
FR-1000	Rockwater	Friction Reducer	Mineral Oil	Proprietary	25.00%
FR-100AE	Universal Pressure Pumping	Friction Reducer	Mineral Oil	Proprietary	20.00%
FR-1010	Rockwater	Friction Reducer	Surfactant	Proprietary	5.00%
FR-1010	Rockwater	Friction Reducer	Other Components Below Reportable Levels	Proprietary	65.00%
FR-1010	Rockwater	Friction Reducer	Mineral Oil	Proprietary	30.00%
FR-11	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	50.00%
FR-11	NexTier Completions Solutions	Friction Reducer	Chemplex-Polymer-00019	Proprietary	20.00%
FR-11	NexTier Completions Solutions	Friction Reducer	Petroleum distillate, Hydrotreated Light	64742-47-8	20.00%
FR-11	NexTier Completions Solutions	Friction Reducer	oleic acid diethanolamide	93-83-4	2.00%
FR-11	NexTier Completions Solutions	Friction Reducer	alcohols, C 12-16, ethoxylated	68551-12-2	2.00%
FR-2800C	Chemstream	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	30.00%
FR-2800C	Chemstream	Friction Reducer	alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	5.00%
FR-2800C	Chemstream	Friction Reducer	Water	7732-18-5	60.00%
FR-2800C	Chemstream	Friction Reducer	Polyacrylamide	9003-05-8	60.00%
FR-30V	Iron Horse Chemicals	Friction Reducer	Hydrotreated light Distillate (petroleum)	64742-47-8	60.00%
FR-30V	Iron Horse Chemicals	Friction Reducer	Ethoxylated branched C11-C14, C13 rich alcohols	78330-21-9	5.00%
FR-30V	Iron Horse Chemicals	Friction Reducer	alcohols, C12-16, ethoxylated	68551-12-2	5.00%
FR-516	Frac-Chem	Friction Reducer	Water	7732-18-5	66.00%
FR-516	Frac-Chem	Friction Reducer	Petroleum Distillates	64742-47-8	24.00%
FR-516	Frac-Chem	Friction Reducer	Ammonium Chloride	12125-02-9	10.00%
Fresh Water	Operator	Carrier Fluid	Water	7732-18-5	100.00%
FWB100D	Nalco	Live Breaker	Ammonium Persulphate	7727-54-0	100.00%
GA-15L	Frac-Chem	Water Gelling Agent	Suspending Agent	1302-78-9	5.00%
GA-15L	Frac-Chem	Water Gelling Agent	Petroleum Distillate	64742-47-8	40.00%
GA-15L	Frac-Chem	Water Gelling Agent	Guar Gum	9000-30-0	55.00%

RECEIVED
Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

GB 300 E HT	Dakota Chemical	Breaker	Diethylene glycol monobutyl ether	112-34-5	5.00%
GB 300 E HT	Dakota Chemical	Breaker	Ammonium Persulfate	7727-54-0	80.00%
GB-100 EHT	Dakota Chemical	Breaker	Silica, crystalline quartz	14808-60-7	16.00%
GB-100 EHT	Dakota Chemical	Breaker	Cured Acrylic Resin	N/A	25.00%
GB-100 EHT	Dakota Chemical	Breaker	Ammonium persulfate	7727-54-0	60.00%
Greenhib 679	Chemplex	Scale Inhibitor	Scale inhibitor	Proprietary	40.00%
Greenhib 679	Chemplex	Scale Inhibitor	Glycerine	56-81-5	30.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Water	7732-18-5	20.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Potassium Chloride	7447-40-7	5.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Methanol	67-56-1	10.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Ethylene Glycol	107-21-1	30.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Amine Phosphate 5, Potassium Salt	Proprietary	30.00%
Gyptron T-475	Nalco Champion	Scale Inhibitor	Amine Phosphate 5	Proprietary	5.00%
Hi Flow 14	DCS	Friction Reducer	Petroleum Distillate Hydrotreated Light	64742-47-8	45.00%
Hi Flow 5	DCS	Friction Reducer	Petroleum Distillate Hydrotreated Light	64742-47-8	28.00%
HiRate Plus 1200	Innospec Oilfield Services	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	30.00%
HiRate Plus 1200	Innospec Oilfield Services	Friction Reducer	4-Nonylphenol, branched, ethoxylated	127087-87-0	4.99%
HpH-970	Frac-Chem	Activator	Water	7732-18-5	65.00%
HpH-970	Frac-Chem	Activator	Sodium Hydroxide	1310-73-2	35.00%
Hydrochloric Acid	Sabre	Hydrochloric Acid	Water	7732-18-5	85.00%
Hydrochloric Acid	Sabre	Hydrochloric Acid	Hydrogen Chloride	7647-01-0	15.00%
Hydrochloric Acid (7.5%)	Universal Pressure Pumping	Acidizing	Hydrochloric Acid	7647-01-0	15.00%
Hydrogen Chloride	Baker Hughes	Biocide	Water	7732-18-5	85.00%
Hydrogen Chloride	Baker Hughes	Biocide	Hydrogen Chloride	7647-01-0	15.00%
ICC 400	Iron Horse Chemicals	Clay Stabilizer	magnesium chloride	7786-30-3	confidential
ICC 400	Iron Horse Chemicals	Clay Stabilizer	Citric Acid	77-92-9	18.00%
Innoprop RC	US Silica	Propping Agent	Phenol-formaldehyde copolymer	9003-35-4	5.00%
Innoprop RC	US Silica	Propping Agent	Hexamine	100-97-0	0.40%
Innoprop RC	US Silica	Propping Agent	Crystalline Silica (quartz)	14808-60-7	98.00%
ISR-100	WadeCo Specialties	Biocide	Proprietary	Proprietary	100.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	xylene	1330-20-7	5.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
www.DepartmentofEnvironmentalProtection

KAI-12	NexTier Completions Solutions	Corrosion inhibitor	prop-2-yn-1-ol	107-19-7	5.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	Methanol	67-56-1	90.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	isoproyl alcohol	67-63-0	5.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	fatty imidazoline	61790-69-0	5.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	ethylbenzene	100-41-4	1.00%
KAI-12	NexTier Completions Solutions	Corrosion inhibitor	Alcohols, C7-9-iso-, C8-rich	68526-83-0	5.00%
KAI-9	Economy Polymers	Corrosion inhibitor	Water	7732-18-5	10.00%
KAI-9	Economy Polymers	Corrosion inhibitor	Fatty Acids	61790-12-3	10.00%
KCC-9	NexTier Completions Solutions	Clay Control	Water	7732-18-5	60.00%
KCC-9	NexTier Completions Solutions	Clay Control	Trade Secret	Proprietary	60.00%
KCC-9	NexTier Completions Solutions	Clay Control	Trade Secret	Proprietary	15.00%
KDF-1	NexTier Completions Solutions	Defoamer	This material is not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29CFR 1910.1200.	Proprietary	100.00%
KDF-3	NexTier Completions Solutions	Defoamer	This material is not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29CFR 1910.1200.	Proprietary	100.00%
KFE-14	NexTier Completions Solutions	Surfactant	dipropylene glycol, monomethyl ether	34590-94-8	30.00%
KFE-14	NexTier Completions Solutions	Surfactant	Citrus Terpenes	68647-72-3	10.00%
KFEAC-30	NexTier Completions Solutions	Iron control	citric acid	77-92-9	40.00%
KFEAC-30	NexTier Completions Solutions	Iron control	acetic acid	64-19-7	60.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

KFR-12	NexTier Completions Solutions	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	45.00%
KFR-12	NexTier Completions Solutions	Friction Reducer	Alcohols, C12-15-branched and linear, ethoxylated, propoxylated	120313-48-6	5.00%
KFR-36	NexTier Completions Solutions	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	60.00%
KFR-38	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	60.00%
KFR-38	NexTier Completions Solutions	Friction Reducer	Petroleum Distillate	64742-47-8	20.00%
KFR-38	NexTier Completions Solutions	Friction Reducer	Oleic Acid Diethanolamide	93-83-4	1.00%
KFR-38	NexTier Completions Solutions	Friction Reducer	Ammonium Chloride	12125-02-9	1.00%
KFR-40	NexTier Completions Solutions	Friction Reducer	Proprietary Surfactant Blend	Proprietary	30.00%
KFR-40	NexTier Completions Solutions	Friction Reducer	Proprietary Polymer	Proprietary	30.00%
KFR-40	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	5.00%
KGBO-1	NexTier Completions Solutions	Breaker	Sodium perborate tetrahydrate	10486-00-7	95.00%
KpH-14L	NexTier Completions Solutions	pH Control	Water	7732-18-5	75.00%
KpH-14L	NexTier Completions Solutions	pH Control	Sodium Hydroxide	1310-73-2	25.00%
KS-15	NexTier Completions Solutions	Surfactant	Water	7732-18-5	75.00%
KS-15	NexTier Completions Solutions	Surfactant	Methanol	67-56-1	30.00%
KS-15	NexTier Completions Solutions	Surfactant	Alkoxylated alcohol	78330-23-1	15.00%
KSI-20	NexTier Completions Solutions	Scale Inhibitor	Phosphonic acid	Proprietary	10.00%
KSI-20	NexTier Completions Solutions	Scale Inhibitor	nitrilotrimethylenetris(phosphonic acid)	Proprietary	5.00%
KSI-20	NexTier Completions Solutions	Scale Inhibitor	Methanol	67-56-1	15.00%
KSI-24	NexTier Completions Solutions	Scale Inhibitor	proprietary amine	Proprietary	5.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024

Department of
Environmental Protection

KSI-24	NexTier Completions Solutions	Scale Inhibitor	polyphosphonic acid	Proprietary	20.00%
KSI-24	NexTier Completions Solutions	Scale Inhibitor	hydrochloric acid (HCl)	7647-01-0	1.00%
KSI-24	NexTier Completions Solutions	Scale Inhibitor	amine phosphonate	Proprietary	20.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	proprietary amine	Proprietary	2.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	polyphosphonic acid	Proprietary	2.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	Methanol	67-56-1	15.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	hydrochloric acid	7647-01-0	1.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	Ethylene Glycol	107-21-1	5.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	ammonium chloride	12125-02-9	1.00%
KSI-24W	NexTier Completions Solutions	Scale Inhibitor	amine phosphonate	Proprietary	2.00%
KSV-17	Rockwater Energy Solutions	High Viscosity Friction Reducer	Water	7732-18-5	10.00%
KSV-17	Rockwater Energy Solutions	High Viscosity Friction Reducer	Surfactant Blend	Proprietary	10.00%
KSV-17	Rockwater Energy Solutions	High Viscosity Friction Reducer	Petroleum Distillate Hydrotreated Light	64742-47-8	80.00%
KWBO-13	NexTier Completions Solutions	Breaker	Ammonium persulfate	7727-54-0	85.00%
KWG-111L	NexTier Completions Solutions	Gelling Agent	Trade Secret	Proprietary	10.00%
KWG-111L	NexTier Completions Solutions	Gelling Agent	Solvent naptha (petroleum) heavy aliph.	64742-96-7	60.00%
KWG-111L	NexTier Completions Solutions	Gelling Agent	Guar Gum	9000-30-0	60.00%
KWG-7L	NexTier Completions Solutions	Gelling Agent	Trade Secret	Proprietary	5.00%
KWG-7L	NexTier Completions Solutions	Gelling Agent	Trade Secret	Proprietary	3.00%
KWG-7L	NexTier Completions Solutions	Gelling Agent	Trade Secret	Proprietary	3.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024

U.S. Department of
Environmental Protection

KWG-7L	NexTier Completions Solutions	Gelling Agent	Solvent Naptha (Petroleum), Heavy aliph.	64742-96-7	60.00%
KWG-7L	NexTier Completions Solutions	Gelling Agent	Sodium carboxy methyl cellulose	9004-32-4	50.00%
KWXB-12	NexTier Completions Solutions	Crosslinker	Trade Secret	Proprietary	33.00%
KWXB-12	NexTier Completions Solutions	Crosslinker	Sodium Hydroxide	1310-73-2	34.00%
KWXB-12	NexTier Completions Solutions	Crosslinker	Ethanediol	107-21-1	33.00%
KWXB-19	NexTier Completions Solutions	Crosslinker	Water	7732-18-5	38.50%
KWXB-19	NexTier Completions Solutions	Crosslinker	Trade Secret	Proprietary	confidential
KWXB-19	NexTier Completions Solutions	Crosslinker	Trade Secret	Proprietary	confidential
KWXB-19	NexTier Completions Solutions	Crosslinker	Inorganic Borates	1319-33-1	confidential
KWXB-19	NexTier Completions Solutions	Crosslinker	Ethylene glycol	107-21-1	24.00%
KWXB-19	NexTier Completions Solutions	Crosslinker	disodium tetraborate decahydrate	1303-96-4	confidential
KWXB-20	NexTier Completions Solutions	Crosslinker	Sodium Hydroxide	1310-73-2	10.00%
KWXB-20	NexTier Completions Solutions	Crosslinker	Sodium Borate	1303-96-4	10.00%
KWXB-20	NexTier Completions Solutions	Crosslinker	Ethylen glycol	107-21-1	10.00%
LX-204E	Flotek	Friction Reducer	Petroleum distillates, hydrotreated light	64742-47-8	30.00%
LX-204E	Flotek	Friction Reducer	Ethoxylated Alcohol	68551-12-2	1.00%
Magnacide 575	Baker Hughes	Microbiocide	Tetrakis(hydroxymethyl)phosphonium sulfate	55566-30-8	100.00%
Mayoquest 1900	Chemplex	Scale Inhibitor	Water	7732-18-5	44.00%
Mayoquest 1900	Chemplex	Scale Inhibitor	Hydrochloric acid	7647-01-0	6.00%
Mayoquest 1900	Chemplex	Scale Inhibitor	Bis-triamine	34690-00-1	50.00%
MBC 10:5	NexTier Completions Solutions	Biocide	Other Components	Proprietary	80.00%
MBC 10:5	NexTier Completions Solutions	Biocide	Glutaraldehyde	111-30-8	5.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024

WV Department of
Environmental Protection

MBC 10:5	NexTier Completions Solutions	Biocide	Ethanol	64-17-5	5.00%
MBC 10:5	NexTier Completions Solutions	Biocide	Alkyl dimethyl benzyl ammonium chloride	68424-85-1	10.00%
MC B-8614	Multi-Chem	Biocide	Glutaraldehyde	111-30-8	30.00%
MC B-8614	Multi-Chem	Biocide	Alkyl (C12-16) dimethylbenzylammonium chloride	68424-85-1	5.00%
MCS-376	Ace Completions	Surfactant	Water	7732-18-5	65.00%
MCS-376	Ace Fluid Solutions	Surfactant	Water	7732-18-5	68.50%
MCS-376	Ace Completions	Surfactant	Solvent Naptha (Petroleum), Heavy aromatic	64742-94-5	1.00%
MCS-376	Ace Fluid Solutions	Surfactant	Solvent Naphtha (Petroleum), Heavy Aromatic	64742-94-5	1.00%
MCS-376	Ace Completions	Surfactant	Proprietary	Proprietary	10.00%
MCS-376	Ace Fluid Solutions	Surfactant	Proprietary	Proprietary	7.50%
MCS-376	Ace Completions	Surfactant	Poly(oxy-1,2-ethanediyl), alpha hexyl-omega-hydroxy	31726-34-8	3.00%
MCS-376	Ace Fluid Solutions	Surfactant	Poly(oxy-1,2-ethanediyl), alpha hexyl-omega-hydroxy	31726-34-8	3.00%
MCS-376	Ace Completions	Surfactant	Isotridecanol, ethoxylated	9043-30-5	3.00%
MCS-376	Ace Fluid Solutions	Surfactant	Isotridecanol, ethoxylated	9043-30-5	3.00%
MCS-376	Ace Completions	Surfactant	Ethylene oxide/propylene oxide co-polymer	9003-11-6	8.00%
MCS-376	Ace Fluid Solutions	Surfactant	Ethylene oxide/propylene oxide co-polymer	9003-11-6	7.50%
MCS-376	Ace Completions	Surfactant	Diethanolamine	111-42-2	1.00%
MCS-376	Ace Fluid Solutions	Surfactant	Diethanolamine	111-42-2	1.00%
MCS-376	Ace Completions	Surfactant	Coconut diethanolamide	68603-42-9	6.00%
MCS-376	Ace Fluid Solutions	Surfactant	Coconut Diethanolamide	68603-42-9	5.50%
MCS-376	Ace Completions	Surfactant	Alcohol	68609-68-7	3.00%
MCS-376	Ace Fluid Solutions	Surfactant	Alcohol	68609-68-7	3.00%
Mega-Surf 101	Shrieve	Surfactant	Water	7732-18-5	55.00%
Mega-Surf 101	Shrieve	Surfactant	Propylene Glycol Ether	Proprietary	20.00%
Mega-Surf 101	Shrieve	Surfactant	Ethoxylated Alcohol	Proprietary	40.00%
Mega-Surf 102	Shrieve	Surfactant	Water	7732-18-5	55.00%
Mega-Surf 102	Shrieve	Surfactant	Propylene Glycol Ether	Proprietary	20.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

Mega-Surf 102	Shrieve	Surfactant	Ethoxylated Alcohol	Proprietary	40.00%
MM-500	Binder Science	Friction Reducer	Trade Secret	Proprietary	50.00%
MM-500	Binder Science	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-46-7	50.00%
Myacide GA 25	Shrieve	Biocide	Water	7732-18-5	75.00%
Myacide GA 25	Shrieve	Biocide	Glutaraldehyde	111-30-8	25.00%
NanoActiv	Nissan Chemical America				
NBR-1	NexTier Completions Solutions	Gel Breaker	Ammonium Persulfate	7727-54-0	95.00%
NBR-15	NexTier Completions Solutions	Gel Breaker	Ammonium Persulfate	7727-54-0	100.00%
NBR-2	NexTier Completions Solutions	Breaker	Sodium persulfate	7775-27-1	100.00%
NBR-2	NexTier Completions Solutions	Breaker	Sodium Persulfate	7775-27-1	99.00%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor	surfactant	Proprietary	7.50%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor	Propargyl Alcohol	107-19-7	2.50%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor.	prop-2-yn-1-ol	107-19-7	5.00%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor	Methanol	67-56-1	60.00%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor	formic acid	64-18-6	15.00%
NCI-18	NexTier Completions Solutions	Corrosion inhibitor	alkyl pyridine benzyl quaternary ammonium chlorid	68909-18-2	15.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	alkyl pyridine benzyl quaternary ammonium chloride	68909-18-2	30.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	Methanol	67-56-1	30.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	Isopropanol	67-63-0	30.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	Nonylphenol Polyethylene Glycol Ether	127087-87-0	20.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	Acetic Acid	64-19-7	10.00%
NCI-24	NexTier Completions Solutions	Corrosion Inhibitor	2-Ethylhexanol	104-76-7	5.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

NCS-15	NexTier Completions Solutions	Clay Control	Proprietary	Proprietary	100.00%
NE-1	NexTier Completions Solutions	Surfactant	Water	7732-18-5	70.00%
NE-1	NexTier Completions Solutions	Surfactant	Sodium Thiosulfate	7772-98-7	40.00%
NE-1	NexTier Completions Solutions	Surfactant	Proprietary	Proprietary	10.00%
NE-1	NexTier Completions Solutions	Surfactant	Proprietary	Proprietary	10.00%
NE-1	NexTier Completions Solutions	Surfactant	Proprietary	Proprietary	60.00%
NE-1	NexTier Completions Solutions	Surfactant	Methanol	67-56-1	60.00%
NE-227	ACE COMPLETIONS	NON-EMULSIFER	WATER	7732-18-5	90.00%
NE-227	ACE COMPLETIONS	NON-EMULSIFER	Proprietary	9003-11-6	3.00%
NE-227	ACE COMPLETIONS	NON-EMULSIFER	AMINE SULFONATE	26836-07-7	3.00%
NE-227	ACE COMPLETIONS	NON-EMULSIFER	ALCOHOL	68609-68-7	4.00%
NE-601	Economy Polymers	Non-emulsifying Agent	Water	7732-18-5	30.00%
NE-601	Economy Polymers	Non-emulsifying Agent	Triethylene Glycol	112-27-6	15.00%
NE-601	Economy Polymers	Non-emulsifying Agent	Methanol	64-17-5	50.00%
NE-601	Economy Polymers	Non-emulsifying Agent	Coconut Diethanolamide	68603-42-9	25.00%
Newcide 669	Newpark Drilling Fluids	Biocide	Other Components Below Reportable Levels		83.80%
Newcide 669	Newpark Drilling Fluids	Biocide	Glutaraldehyde	111-30-8	12.20%
Newcide 669	Newpark Drilling Fluids	Biocide	Ethanol	64-17-5	1.00%
Newcide 669	Newpark Drilling Fluids	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	1.75%
Newcide 669	Newpark Drilling Fluids	Biocide	Alkyl dimethyl benzyl ammonium chloride (C 12-16)	68424-85-1	1.25%
NewStim Breaker MT	Newpark Drilling Fluids	Breaker	Quartz	14808-60-7	10.00%
NewStim Breaker MT	Newpark Drilling Fluids	Breaker	Cured Acrylic Resin	Proprietary	30.00%
NewStim Breaker MT	Newpark Drilling Fluids	Breaker	Ammonium Persulfate	7727-54-0	60.00%
NewStim CC 329	Newpark Drilling Fluids	Clay Control	Modified Polysaccharide	Proprietary	100.00%
NewStim SI 285	Newpark Drilling Fluids	Scale Inhibitor	TSCA, DSL, EU, IECSC, AICS, NZIoC Inventories	Proprietary	1.00%
NewStim SI 285	Newpark Drilling Fluids	Scale Inhibitor	Sodium Phospate	7601-54-9	0.15%
NewStim SI 285	Newpark Drilling Fluids	Scale Inhibitor	Sodium Chloride	7647-14-5	1.35%
NFR-45	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

NFR-45	NexTier Completions Solutions	Friction Reducer	Alcohols, C11-14-iso, C13-rich, ethoxylated	78330-21-9	5.00%
NFR-50	NexTier Completions Solutions	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	20.00%
NFR-50	NexTier Completions Solutions	Friction Reducer	alcohols, C12-16, ethoxylated	68551-12-2	5.00%
NFR-53	NexTier Completions Solutions	Friction Reducer	Proprietary Surfactant Blend	Proprietary	5.00%
NFR-53	NexTier Completions Solutions	Friction Reducer	Proprietary Polymer	Proprietary	30.00%
NFR-53	NexTier Completions Solutions	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	30.00%
NFR-54	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	60.00%
NFR-54	NexTier Completions Solutions	Friction Reducer	oleic acid diethanolamide	93-83-4	1.50%
NFR-54	NexTier Completions Solutions	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	20.00%
NFR-54	NexTier Completions Solutions	Friction Reducer	Ammonium Chloride	12125-02-9	2.00%
NFR-54	NexTier Completions Solutions	Friction Reducer	alcohols, C12-16, ethoxylated	68551-12-2	1.50%
NFR-56	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	50.00%
NFR-56	NexTier Completions Solutions	Friction Reducer	Chemplex-Polymer-00019	Proprietary	20.00%
NFR-56	NexTier Completions Solutions	Friction Reducer	Petroleum distillate, Hydrotreated Light	64742-47-8	20.00%
NFR-56	NexTier Completions Solutions	Friction Reducer	oleic acid diethanolamide	93-83-4	2.00%
NFR-56	NexTier Completions Solutions	Friction Reducer	alcohols, C 12-16, ethoxylated	68551-12-2	2.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	11.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Sorbitan Monooleate	1338-43-8	1.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Sodium Thiosulfate	7772-98-7	40.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Sodium Chloride	7647-14-5	5.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

Department of
Environmental Protection

NFR-58	NexTier Completions Solutions	Friction Reducer	Polyethylene-Glycol	25322-68-3	1.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Dodecylbenzenesulfonic acid	27176-87-0	1.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	20.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Alkoxylate	9005-65-6	1.00%
NFR-58	NexTier Completions Solutions	Friction Reducer	Acrylate polymer	25085-02-3	20.00%
NFR-64	NexTier Completions Solutions	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	30.00%
NFR-64	NexTier Completions Solutions	Friction Reducer	Proprietary Surfactant Blend	Proprietary	10.00%
NFR-64	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	60.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	60.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Sodium Thiosulfate	7772-98-7	40.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Sodium Chloride	7647-14-5	0.50%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Heavy Aromatic Naphtha	64742-94-5	1.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Dodecylbenzenesulfonic acid	27176-87-0	1.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Alkoxylate	9005-65-6	1.00%
NFR-68X	NexTier Completions Solutions	Friction Reducer	Acrylate polymer	25085-02-3	30.00%
NGA-10D	NexTier Completions Solutions	Gelling Agent	Guar gum	9000-30-0	95.00%
NGA-10D	NexTier Completions Solutions	Gelling Agent	Guar Gum	9000-30-0	95.00%
NGA-9D	NexTier Completions Solutions	Gelling Agent	Guar Gum	9000-30-0	100.00%
NHV-33	NexTier Completions Solutions	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	45.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

NHV-33	NexTier Completions Solutions	Friction Reducer	Polyoxyethylene Tridecyl (Branched) Alcohol	69011-36-5	3.00%
NHV-33	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	52.00%
NHV-37	NexTier Completions Solutions	High Viscosity Friction Reducer	Silica, crystalline quartz	14808-60-7	0.10%
NHV-37	NexTier Completions Solutions	High Viscosity Friction Reducer	Mineral Oil	Proprietary	70.00%
NHV-37	NexTier Completions Solutions	High Viscosity Friction Reducer	Ethoxylated Alcohol	Proprietary	10.00%
NHV-49	NexTier Completions Solutions	Friction Reducer	Proprietary Petroleum Distillates	Proprietary	60.00%
NHV-49	NexTier Completions Solutions	Friction Reducer	Proprietary Fatty Acid Ester	Proprietary	5.00%
NHV-50	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00%
NHV-50	NexTier Completions Solutions	Friction Reducer	alcohols, C12-16, ethoxylated	68551-12-2	2.00%
NHV-53	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	70.00%
NHV-53	NexTier Completions Solutions	Friction Reducer	Sodium Thiosulfate	7772-98-7	40.00%
NHV-53	NexTier Completions Solutions	Friction Reducer	Sodium acrylate acrylamide polymer	Proprietary	30.00%
NHV-53	NexTier Completions Solutions	Friction Reducer	Proprietary Surfactant Blend	Proprietary	10.00%
NHV-53	NexTier Completions Solutions	Friction Reducer	Oil	Proprietary	30.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	21.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Sodium Chloride	7647-14-5	5.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Poly(ethylene glycol) monooleate	9004-96-0	4.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Poly(acrylamide-co-sodium acrylate)	25085-02-3	30.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Heavy aromatic Naptha	64742-94-5	5.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	20.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

NHV-75	NexTier Completions Solutions	Friction Reducer	DDBSA	27176-87-0	10.00%
NHV-75	NexTier Completions Solutions	Friction Reducer	Alkoxylate	9005-65-6	5.00%
NHV-83	NexTier Completions Solutions	Friction Reducer	Water	7732-18-5	76.00%
NHV-83	NexTier Completions Solutions	Friction Reducer	Ethoxylated castor oil	61791-12-6	1.00%
NHV-83	NexTier Completions Solutions	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	20.00%
NHV-83	NexTier Completions Solutions	Friction Reducer	ammonium chloride	12125-02-9	3.00%
NIC-20	NexTier Completions Solutions	Iron control	acetic acid	64-19-7	50.00%
NIC-20	NexTier Completions Solutions	Iron control	Acetic Acid	64-19-7	55.00%
NIC-21	NexTier Completions Solutions	Iron control	citric acid	77-92-9	30.00%
NI-NE 200	Dakota Chemical	Non-emulsifying Agent	Water	7732-18-5	100.00%
NI-NE 200	Dakota Chemical	Non-emulsifying Agent	Sodium carbonate	497-19-8	12.00%
NI-NE 200	Dakota Chemical	Non-emulsifying Agent	(R)-p-mentha-1, 8-diene	5989-27-5	2.50%
nonActive Enhanced Bio-Lift 95	Iron Horse Chemicals	Surfactant	Proprietary	Proprietary	5.00%
nonActive Enhanced Bio-Lift 95	Iron Horse Chemicals	Collodial Partical Dispersion	Proprietary	Proprietary	5.00%
NPM-14	NexTier Completions Solutions	Buffering Agent	Water	7732-18-5	75.00%
NPM-14	NexTier Completions Solutions	Buffering Agent	Sodium Hydroxide	1310-73-2	25.00%
NPM-4	NexTier Completions Solutions	Buffering Agent	Acetic Acid	64-19-7	60.00%
NRL-1W	NexTier Completions Solutions	Surfactant	Trade Secret	Proprietary	25.00%
NRL-1W	NexTier Completions Solutions	Surfactant	Trade Secret	Proprietary	25.00%
NRL-1W	NexTier Completions Solutions	Surfactant	Methanol	67-56-1	30.00%
NRL-1W	NexTier Completions Solutions	Surfactant	Methanol	67-56-1	30.00%
NSA-3	NexTier Completions Solutions	Acid	Water	7732-18-5	17.90%

RECEIVED
Office of Oil and Gas

OCT 9 2024

Department of
Environmental Protection

NSA-3	NexTier Completions Solutions	Acid	Sodium Thiosulfate	7772-98-7	40.00%
NSA-3	NexTier Completions Solutions	Acid	Sodium Chloride	7647-14-5	0.10%
NSA-3	NexTier Completions Solutions	Acid	Sodium Benzoate	532-32-1	0.10%
NSA-3	NexTier Completions Solutions	Acid	Proprietary Surfactant	Proprietary	0.10%
NSA-3	NexTier Completions Solutions	Acid	Proprietary Base	Proprietary	10.00%
NSA-3	NexTier Completions Solutions	Acid	Proprietary Acid	Proprietary	30.00%
NSA-3	NexTier Completions Solutions	Acid	Potassium Iodide	7681-11-0	0.10%
NSA-3	NexTier Completions Solutions	Acid	Methanol	67-56-1	0.10%
NSA-3	NexTier Completions Solutions	Acid	Methanesulfonic Acid	75-75-2	0.10%
NSA-3	NexTier Completions Solutions	Acid	Inhibitor	Proprietary	0.10%
NSA-3	NexTier Completions Solutions	Acid	Ethyl acetate	141-78-6	0.10%
NSA-3	NexTier Completions Solutions	Acid	Ethanol	64-17-5	0.10%
NSA-3	NexTier Completions Solutions	Acid	Cocamidopropyl betaine	61789-40-0	0.10%
NSA-3	NexTier Completions Solutions	Acid	Alcohols, C9-11-iso-, C10-rich, ethoxylated propoxylated	68002-97-1	0.10%
NSA-3	NexTier Completions Solutions	Acid	2-Propyn-1-ol compound with methyloxirane	38172-91-7	1.00%
NSI-32	NexTier Completions Solutions	Scale Inhibitor	Water	7732-18-5	84.00%
NSI-32	NexTier Completions Solutions	Scale Inhibitor	Proprietary Scale Inhibitor	Proprietary	15.00%
NSI-32	NexTier Completions Solutions	Scale Inhibitor	Acidity Regulator	Proprietary	1.00%
NSI-38	NexTier Completions Solutions	Scale Inhibitor	Hexamethylene triamine penta (methylene phosonic acid)	34690-00-1	10.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
Department of
Environmental Protection

NSI-38	NexTier Completions Solutions	Scale Inhibitor	Water	7732-18-5	90.00%
NSI-38W	NexTier Completions Solutions	Scale Inhibitor	Hexamethylene triamine penta (methylene phosphonic acid)	34690-00-1	10.00%
NSI-38W	NexTier Completions Solutions	Scale Inhibitor	Water	7732-18-5	90.00%
NSU-17	NexTier Completions Solutions	Surfactant	Water	7732-18-5	70.00%
NSU-17	NexTier Completions Solutions	Surfactant	Ethylene/propylene Oxide Polymer	Proprietary	10.00%
NSU-17	NexTier Completions Solutions	Surfactant	Amine Sulfonate	26836-07-7	10.00%
NSU-17	NexTier Completions Solutions	Surfactant	Alcohols, C11-14-iso, C13-rich, ethoxylated	78330-21-9	5.00%
NSU-17	NexTier Completions Solutions	Surfactant	Alcohol	68609-68-7	5.00%
NSU-17W	NexTier Completions Solutions	Surfactant	Proprietary Surfactant Blend	Proprietary	10.00%
NSU-17W	NexTier Completions Solutions	Surfactant	Methanol	67-56-1	40.00%
NSU-17W	NexTier Completions Solutions	Surfactant	Isotridecanol, ethoxylated	9043-30-5	5.00%
NSU-17W	NexTier Completions Solutions	Surfactant	ethylene propylene oxide polymer	Proprietary	10.00%
NXL-31	NexTier Completions Solutions	Borate Crosslinker	Potassium Tetraborate Tetrahydrate	12045-78-2	20.00%
NXL-31	NexTier Completions Solutions	Borate Crosslinker	Potassium Hydroxide	1310-58-3	7.50%
PeroxyMax	Clean Chemistry	Biocide	Water	7732-18-5	94.20%
PeroxyMAX	CLEAN CHEMISTRY	BIOCIDE	WATER	7732-18-5	94.20%
PeroxyMax	Clean Chemistry	Biocide	Sodium Peracetate	64057-57-4	5.80%
PeroxyMAX	CLEAN CHEMISTRY	BIOCIDE	Sodium Peracetate	64057-57-4	5.80%
Plexaid 680	Chemplex	Scale Inhibitor	Organic Phosphoric Acid	Proprietary	20.00%
Plexaid 680	Chemplex	Scale Inhibitor	Methanol	67-56-1	10.00%
Plexaid 870	Chemplex	Defoamer	Methanol	67-56-1	50.00%
Plexbor 101	Chemplex	Instant Crosslinker	Potassium Metaborate	13709-94-9	25.00%
Plexbor 101	Chemplex	Instant Crosslinker	Potassium Hydroxide	1310-58-3	3.15%
Plexbor 101	Chemplex	Instant Crosslinker	Ethylene Glycol	107-21-1	10.00%
Plexbor 101	Chemplex	Instant Crosslinker	Diethylene glycol	111-46-6	50.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

Plexcide 15g	Chemplex	Biocide	Quarternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	68424-85-1	3.00%
Plexcide 15g	Chemplex	Biocide	Glutaraldehyde	111-30-8	20.00%
Plexcide 15g	Chemplex	Biocide	Didecyldimethylammonium Chloride	7173-51-5	3.00%
Plexcide 20W	NexTier Completions Solutions	Biocide	1,2-Ethanediol	107-21-1	50.00%
Plexcide 20W	NexTier Completions Solutions	Biocide	Phosphonium, tetrakis(hydroxymethyl)-,sulfate (2:1)	55566-30-8	20.00%
Plexcide 20W	NexTier Completions Solutions	Biocide	quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00%
Plexgel 907L-EB	Chemplex	Gel	Guar Gum	9000-30-0	55.00%
Plexgel 907L-EB	Chemplex	Gel	Distillates, Petroleum, Hydrotreated Light	64742-47-8	35.00%
Plexgel Breaker 10L	Chemplex	Breaker	NA		
Plexslick 953	Chemplex	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	20.00%
Plexsurf 215 ES	Chemplex	Surfactant	Methanol	67-56-1	10.00%
Plexsurf 215 ES	Chemplex	Surfactant	Alkyl (C9-11) alcohol, ethoxylated	68439-46-3	5.00%
Plexsurf 215 ES	Chemplex	Surfactant	Alcohols, C12-13, ethoxylated	66455-14-9	1.00%
PolyBreak 5	DCS	Breaker	Hydrogen Peroxide	7722-84-1	20.00%
Polyglide Xcel-250	PFP Industries	Friction Reducer	Petroleum distillates, hydrotreated light	64742-47-8	70.00%
Produced Water	Operator	Carrier Fluid	Water	7732-18-5	90.00%
Produced Water	Operator	Carrier Fluid	strontium chloride	10476-85-4	2.00%
Produced Water	Operator	Carrier Fluid	sodium chloride	7647-14-5	5.00%
Produced Water	Operator	Carrier Fluid	calcium chloride	10043-52-4	5.00%
Produced Water	Operator	Carrier Fluid	benzene	71-43-2	0.10%
Produced Water	Operator	Carrier Fluid	barium chloride	10326-27-9	2.00%
Product 6191	Nalco	Surfactant	Branched Alcohol Oxyalkylate	Proprietary	30.00%
Propel SSP	Fairmount Santrol	Propping Agent	Water-Soluable Polymer	Proprietary	2.00%
Propel SSP	Fairmount Santrol	Propping Agent	Crystalline Silica, Quartz	14808-60-7	98.00%
Proppant (Ceramic)	NexTier Completions Solutions	Propping Agent	Mullite	1302-93-8	46.00%

RECEIVED
Office of Oil and Gas

OCT 9 2024

Department of
Environmental Protection

Proppant (Ceramic)	NexTier Completions Solutions	Propping Agent	Corundum	1302-74-5	60.00%
Proppant (Sand Operator Supplied)	Operator	Propping Agent	Crystalline Silica, quartz	14808-60-7	100.00%
Proppant (Sand)	NexTier Completions Solutions	Propping Agent	Crystalline Silica, quartz	14808-60-7	100.00%
PS1	Economy Polymers	Breaker	Ammonium Persulfate	7727-54-0	100.00%
PureCide E	Pureline	Biocide	Water	7732-18-5	59.00%
PureCide E	Pureline	Biocide	Sodium Sulfate	7757-82-6	2.00%
PureCide E	Pureline	Biocide	Sodium Chlorite	7758-19-2	34.00%
PureCide E	Pureline	Biocide	Sodium Chloride	7647-14-5	6.00%
PureCide E	Pureline	Biocide	Sodium Chlorate	7775-09-9	3.00%
ReDirect-250	NexTier Completions Solutions	Diverter	Proprietary Blend	Proprietary	100.00%
ReDirect-250CFL	NexTier Completions Solutions	Diverter	Trade Secret	Proprietary	60.00%
ReDirect-250CFL	NexTier Completions Solutions	Diverter	Trade Secret	Proprietary	40.00%
ReDirect-250CFL	NexTier Completions Solutions	Diverter	Trade Secret	Proprietary	10.00%
ReDirect-250CFL	NexTier Completions Solutions	Diverter	Polyactide resin	9051-89-2	30.00%
ReDirect-500	NexTier Completions Solutions	Diverter	Trade Secret	Proprietary	100.00%
RSA-2	NexTier Completions Solutions	Acid	Patented Safe Acid	Proprietary	100.00%
S-212	Rockwater	Gelling Agent	Guar Gum	9000-30-0	40.00%
S-212	Rockwater	Gelling Agent	Distillates, Petroleum, Hydrotreated Light	64742-47-8	60.00%
Sabrechlor 25	Sabre	Biocide	Water	7732-18-5	75.00%
Sabrechlor 25	Sabre	Biocide	Sodium Chlorite	7758-19-2	25.00%
Scal Hib PE-18W	NexTier Completions Solutions	Scale Inhibitor	Diethylene glycol	111-46-6	30.00%
Scal Hib PE-18W	NexTier Completions Solutions	Scale Inhibitor	WST-Scale Inhibitor-00014	Proprietary	30.00%
Scal Hib PE-18W	NexTier Completions Solutions	Scale Inhibitor	Ethylene glycol	107-21-1	20.00%
SCAL18415A	ChampionX	Scale Inhibitor	Monoethanolamine hydrochloride	Proprietary	15.00%
SCAL18415A	ChampionX	Scale Inhibitor	Methanol	67-56-1	7.50%
SCAL18415A	ChampionX	Scale Inhibitor	Ammonium Chloride	12125-02-9	250.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
www.Department of
Environmental Protection

SCAL18415A	ChampionX	Scale Inhibitor	Amine Phosphonate 7, Ethanolamine Salt	Proprietary	7.50%
SCAL18415A	ChampionX	Scale Inhibitor	amine phosphonate	Proprietary	15.00%
Scale 803	Iron Horse Chemicals	Scale Inhibitor	Proprietary	Proprietary	10.00%
ScaleBlok 10	DCS	Scale Inhibitor	Proprietary non-hazardous polymers	Proprietary	25.00%
ScaleGuard II	Carbo	Scale Inhibitor	Sodium Hydroxide	1310-73-2	5.00%
ScaleGuard II	Carbo	Scale Inhibitor	Semi-Permeable Coating	Proprietary	5.00%
ScaleGuard II	Carbo	Scale Inhibitor	Diethylenetriaminepenta (methylenephosphonic acid) (DTPMP)	15827-60-8	5.00%
ScaleGuard II	Carbo	Scale Inhibitor	Ceramic Materials and Wares, Chemicals	66402-68-4	90.00%
ScaleGuard II	Carbo	Scale Inhibitor	Calcium Chloride	10043-52-4	2.00%
Scalesorb 12	Baker Hughes	Scale Inhibitor	Organophosphorous salt	Proprietary	65.00%
Scalesorb 12	Baker Hughes	Scale Inhibitor	Diatomaceous earth, calcined	91053-39-3	45.00%
Scalesorb 12	Baker Hughes	Scale Inhibitor	Crystalline silica: Quartz (SiO2)	14808-60-7	1.00%
Scalesorb 3	Baker Hughes	Scale Inhibitor	Phosphorous acid	Proprietary	1.00%
Scalesorb 3	Baker Hughes	Scale Inhibitor	Diatomaceous earth, calcined	91053-39-3	69.80%
Scalesorb 3	Baker Hughes	Scale Inhibitor	crystalline silica	14808-60-7	1.00%
Scalesorb 3	Baker Hughes	Scale Inhibitor	Almino alkyl phosphonic acid	Proprietary	30.00%
Scalesorb 4	Baker Hughes	Scale Inhibitor	Polymer Blend	Proprietary	40.00%
Scalesorb 4	Baker Hughes	Scale Inhibitor	Diatomaceous earth, calcined	91053-39-3	60.00%
Scalesorb 6	Baker Hughes	Scale Inhibitor	Organophosphonic Acid Salt	Proprietary	40.00%
Scalesorb 6	Baker Hughes	Scale Inhibitor	Diatomaceous earth, calcined	91053-39-3	70.00%
Scalesorb 6	Baker Hughes	Scale Inhibitor	Crystalline silica: Quartz (SiO2)	14808-60-7	1.00%
Scalesorb 7	Baker Hughes	Scale Inhibitor	Organophosphorous salt	Proprietary	40.00%
Scalesorb 7	Baker Hughes	Scale Inhibitor	Diatomaceous earth, calcined	91053-39-3	65.00%
Scalesorb 7	Baker Hughes	Scale Inhibitor	Crystalline silica: Quartz (SiO2)	14808-60-7	1.00%
Scaletrol 356	Baker Hughes	Scale Inhibitor	Methanol, Organophosphorous salt	67-56-1	10.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
Department of
Environmental Protection

Scaletrol 720	Baker Hughes	Scale Inhibitor	Ethylene Glycol	000107-21-1	45.00%
Scaletrol 720	Baker Hughes	Scale Inhibitor	Diethylene glycol	000111-46-6	5.00%
Scaletrol 767W	Baker Hughes	Scale Inhibitor	Organic Phosphonae	Proprietary	30.00%
Scaletrol 767W	Baker Hughes	Scale Inhibitor	Methanol	67-56-1	30.00%
SCW 358	Baker Hughes	Scale Inhibitor	Organic phosphonate	Trade Secret	30.00%
SCW 358	Baker Hughes	Scale Inhibitor	Hydrochloric acid	7647-01-0	10.00%
SCW 6002	Baker Hughes	Scale Inhibitor	Organo Phosphorus	Proprietary	5.00%
Shrieve-Cide 423	Shrieve	Biocide	Water	7732-18-5	72.00%
Shrieve-Cide 423	Shrieve	Biocide	Sodium Hydroxide	1310-73-2	4.00%
Shrieve-Cide 423	Shrieve	Biocide	Dazomat	533-74-4	24.00%
SI-202F	Astro-Chem Lab, Inc	Iron control	Water	7732-18-5	50.00%
SI-202F	Astro-Chem Lab, Inc	Iron control	Citric Acid	77-92-9	50.00%
SI-208	WadeCO Specialties	Scale Inhibitor			100.00%
SI-219	WadeCo Specialties	Scale Inhibitor	This material is not hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).	Proprietary	100.00%
SI-316	Frac-Chem	Scale Inhibitor	Water	7732-18-5	90.00%
SI-316	Frac-Chem	Scale Inhibitor	This material is not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29CFR 1910.1200.	Proprietary	10.00%
SI-4010	Rockwater	Scale Inhibitor	Proprietary	Proprietary	100.00%
SmartSurf 533	Iron Horse Chemicals	Surfactant	Quaternary ammonium compounds, benzyl-C12-16 alkyldimethyl, chlorides	68424-85-1	8.20%
SmartSurf 533	Iron Horse Chemicals	Surfactant	Methanol	67-56-1	1.40%
SmartSurf 533	Iron Horse Chemicals	Surfactant	Diethanolamine	111-42-2	1.30%
Sodium Hypochlorite 12.5%	Sabre	Biocide	Water	7732-18-5	87.50%
Sodium Hypochlorite 12.5%	Sabre	Biocide	Sodium Hypochlorite	7381-52-9	12.50%
Sodium Hypochlorite 12%	Baker Hughes	Biocide	Water	7732-18-5	85.00%
Sodium Hypochlorite 12%	Baker Hughes	Biocide	Sodium Hypochlorite	7681-52-9	15.00%
StimOil ENX	Flotek	Surfactant	Isopropyl alcohol	67-63-0	30.00%
StimOil ENX	Flotek	Surfactant	Citrus Terpenes	68647-72-3	30.00%
StimOil Q906	Flotek	Surfactant	Terpene Hydrocarbons	68956-56-9	0.55%
StimOil Q906	Flotek	Surfactant	Osooctyl Alcohol	68526-83-0	3.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
Department of
Environmental Protection

StimOil Q906	Flotek	Surfactant	Isopropyl Alcohol	67-63-0	27.50%
StimOil Q906	Flotek	Surfactant	Hydrocarbons C13-C23 n-alkanes isoalkanes cyclics <0.03% aromatics	Proprietary	3.00%
StimOil Q906	Flotek	Surfactant	Anionic Surfactant	Proprietary	3.00%
Stimsolve FR 7205	Chemplex	Friction Reducer	oleic acid diethanolamide	93-83-4	5.00%
Stimsolve FR 7205	Chemplex	Friction Reducer	Distillates (Petroleum), Hydrotreated Light	64742-47-8	20.00%
Stimsolve FR 7205	Chemplex	Friction Reducer	ammonium chloride	12125-02-9	5.00%
StimSTREAM SC 405	Chemstream	Scale Control	2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	37971-36-1	10.00%
StimSTREAM SC 405	Chemstream	Scale Control	Citric Acid	77-92-9	10.00%
StimSTREAM SC 405	Chemstream	Scale Control	Diethylenetriamine penta (methylene phosphonic acid) (DTPMP)	15827-60-8	10.00%
StimSTREAM SC 405	Chemstream	Scale Control	Water	7732-18-5	70.00%
Super LC	Fairmount Santrol	Propping Agent	Phenol-formaldehyde Novolak Resin	9003-35-4	5.00%
Super LC	Fairmount Santrol	Propping Agent	Crystalline Silica (quartz)	14808-60-7	99.50%
TechlubeQ	Conquest	Lubricant	This material is not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29CFR 1910.1200.	Proprietary	100.00%
Technihib 604W	Baker Hughes	Oxygen Scavenger	Water	7732-18-5	43.00%
Technihib 604W	Baker Hughes	Oxygen Scavenger	Nickel Chelate Catalyst	Proprietary	3.00%
Technihib 604W	Baker Hughes	Oxygen Scavenger	Ammonium Bisulfate	010192-30-0	54.00%
Technihib 767W	Baker Hughes	Scale Inhibitor	Water	7732-18-5	65.00%
Technihib 767W	Baker Hughes	Scale Inhibitor	Ethylene Glycol	107-21-1	30.00%
Technihib 767W	Baker Hughes	Scale Inhibitor	Calcium Chloride	10043-52-4	5.00%
Tetra Scale 15-101	Solnexus	Scale Inhibitor	Water	7732-18-5	95.00%
Tetra Scale 15-101	Solnexus	Scale Inhibitor	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	5.00%
Tolcide TP5	NexTier Completions Solutions	Biocide	Water	7732-18-5	95.00%
Tolcide TP5	NexTier Completions Solutions	Biocide	Tributyl Tetradecyl Phosphonium Chloride	81741-28-8	7.50%
TSI-2120	Clean Chemistry	Scale Inhibitor	Polycarboxylic Acid Mixture	Proprietary	60.00%

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of Environmental Protection

ULT130	A. Schulman	Diverter	Trade Secret	Proprietary	100.00%
VEFR-2005	Rockwater	Friction Reducer	Surfactant Blend	Proprietary	10.00%
VEFR-2005	Rockwater	Friction Reducer	Other Components Below Reportable Levels		60.00%
VEFR-2005	Rockwater	Friction Reducer	Mineral Oil	Proprietary	30.00%
V-Scale 400	Valence Chemicals	Scale Inhibitor	Trade Secret	Proprietary	40.00%
WSI3730	Jacam Chemicals	Scale Inhibitor	Proprietary	Proprietary	10.00%
WSI3730	Jacam Chemicals	Scale Inhibitor	Methanol	67-56-1	20.00%
WSI3730	Jacam Chemicals	Scale Inhibitor	Isopropanol	67-63-0	40.00%
WSI3730W	Jacam Chemicals	Scale Inhibitor	Proprietary	Proprietary	10.00%
WSI3730W	Jacam Chemicals	Scale Inhibitor	Methanol	67-56-1	20.00%
WSI3730W	Jacam Chemicals	Scale Inhibitor	Isopropanol	67-63-0	40.00%
XC750	Baker Hughes	Biocide	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	60.00%
XC750	Baker Hughes	Biocide	Phosphonates	Proprietary	40.00%
X-Cide 750	Baker Hughes	Biocide	Water	7732-18-5	40.00%
X-Cide 750	Baker Hughes	Biocide	Tetrakis(Hydroxymethyl)Phosphonium Sulfate	55566-30-8	60.00%
X-Corr LT	Nalco	Corrosion Inhibitor	Isopropyl Alcohol	67-63-0	60.00%
X-Corr LT	Nalco	Corrosion Inhibitor	Fatty Alcohol Ethoxylate	Proprietary	30.00%
X-Corr LT	Nalco	Corrosion Inhibitor	Ethoxylated Alcohol	Proprietary	10.00%
TruSlick 18C	Pad2Pad Logistics	Friction Reducer	Alkanes, C16-20-iso-	90622-59-6	25.00%
TruSlick 18C	Pad2Pad Logistics	Friction Reducer	Hydrotreated Light Distillate (petroleum)	9003-29-6	25.00%
TruSlick 18C	Pad2Pad Logistics	Friction Reducer	Hydrotreated Light Distillate (petroleum)	68213-23-0	25.00%
MSB-12	Pad2Pad Logistics	Biocide	Glutaraldehyde	111-30-8	20.00%
MSB-12	Pad2Pad Logistics	Biocide	Didecyl dimethyl ammonium chloride	7173-51-5	3.00%
MSB-12	Pad2Pad Logistics	Biocide	Quaternary Ammonium Compounds	68424-85-1	3.00%
MSB-12	Pad2Pad Logistics	Biocide	Ethanol	64-17-5	1.50%
MSB-12	Pad2Pad Logistics	Biocide	Non-hazardous substances	Proprietary	80.00%
SI 9125	Pad2Pad Logistics	Scale Inhibitor			
SI 9125	Pad2Pad Logistics	Scale Inhibitor			
SI 9125	Pad2Pad Logistics	Scale Inhibitor			
SI 9125	Pad2Pad Logistics	Scale Inhibitor			

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

FracFocus Proprietary Additives Contact Information

Company	First Name	Last Name	Email	Phone
A. Schulman			amer.regulatory.requests@aschulman.c	800-424-9300
Ace Completions	Jeff	Louis	jlouis@acecompletions.com	713-703-2172
Baker Hughes	Jana	Phillips	Jana.phillips@bakerhughes.com	701-420-8015
Binder Science	Tom	Wentzler	twentzler@binderscience.com	281-419-9047
BlenTech	George	Hahn	jr@blentech.org	281-932-7795
ChemEOR	Patrick	Shuler	patrick.shuler@chemeor.com	909-632-8639
ChemPlex	Edward	Vinson	edward.vinson@solvay.com	701-764-7158
Clean Chemistry	Jeff	Repak	j.repak@cleanchemi.com	469-438-9085
Conquest Completions				1-800-424-9300
Crudechem	Joe	Schmoe	JoeShmoe@Crudechem.com	402-123-4567
Dakota Chemicals	Jacob	Cole	jacob.dakotachemical@gmail.com	830-446-1746
DCS	Wayne	Cutrer	waynecutrer@gmail.com	214-945-5910
DiverterPlus, LLC				833-388-7587
Economy Polymers	Samuel	Stratton	sam@economypolymers.com	713-723-8416
Endura Products Corp	Vince	Vigar	vvigar@enduraproductscorp.com	432-556-2275
Fairmount Santrol	Kurt	Kaiser	Kurt.Kaiser@fairmountsantrol.com	608-635-5833
Flotek	Alora	Breeze	abreeze@flotekind.com	580-658-6608
Innospec Oilfield Services			sdsinfo@innospecinc.com	713-936-4340
Iron Horse Chemicals	Jesse	Schimetz	Jesse@ironhorsechemicals.com	406-853-4097
Multi-Chem	Sarah	Wilson	sarah.wilson@halliburton.com	575-513-8466
Nalco Champion	Gary	Galford	glgalford@nalco.com	814-244-3973
NexTier Completions Solutions	Bethicia	Prasek	Bethicia.Prasek@NexTierOFS.com	281-216-4446
Nissan Chemical America Coporation			www.nissanchem-usa.com	1-800-424-9300
Performance Chemical Company	Keenan	Calt	keenancalt@per-chem.com	432-332-3059
PFP Industries	Rachel	Campos	rachel.campos@pfpindustries.com	281-574-8812
Rock Water	Thomas	Roland	Troland@RockwaterEnergy.com	432-560-5617
Shrieve	Audris	King	aking@shrieve.com	281-367-4226
Universal Pressure Pumping	Joe	Pinkhouse	joe.pinkhouse@patenergy.com	814-373-3237
Valence Chemicals	Adrian	Druba	adruba@valencechems.com	682-561-7016
WadeCo Specialties				432-563-4340
CHAMPIONX	Mark	Hellig	marc.hellig@championx.com	713-410-2828
Jacam Chemicals	Jacam	Chemicals	SDS@jacam.com	620-278-3355

Additive	Specific Gravity	Column1
10% HCl	1.05	
100 mesh sand	2.65	
15% HCl	1.08	
15WF766	1.12	
20% KCl	1.13	
20/40 Mesh	2.65	
2000 PTW	1.30	
25% Sodium Hydroxide	1.27	
28% HCl	1.14	
30/50 Mesh	2.65	
30/50 RCS	2.50	
40/140 Mesh	2.66	
40/70 Mesh	2.65	
40/70 Mesh	2.65	
40/70 Mesh RCS	2.50	
7.5% HCl	1.04	
AC-100	0.96	
AceFlow 3300	0.98	
ACI-100	1.00	
ADM-190	0.94	
AIC100D	1.54	
Alpha 1427	1.05	
Alpha 452	1.17	
Ammonium Persulfate	1.98	
Antimicrobial 220	1.09	
AP Break	1.00	
AP Scale 2S	0.90	
AP Surf 2	0.94	
Bactron K-31	1.08	
Bellacide 300	0.94	
Bellacide 300W	0.94	
Bio Exp 13-59	1.25	
Bio-Add 1200	1.07	
BIO-ADD 4576	1.25	
Bio-Add 807	1.08	
Bio-Add 951	1.10	
BioBalls MR	1.18	
Bioban 5:10	1.02	
Bio-Break 1001	1.72	
Bio-Break 1002	1.98	
Bio-Break 949	0.93	
BIOC11139A	1.01	
BIO-COR 1011	0.89	
Bio-Cross 109	1.16	
BIO-CROSS 109M	1.11	
Bio-Exp 13-22	1.31	
Bio-Exp 13-63	2.50	
Bio-Exp 14-23	1.15	

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

12/13/2024

Bio-Exp 14-8	1.05
Bionix GA1203	1.02
BioRCK-1038	1.00
BIO-SCALE 1001	1.13
Bonderite	0.96
BPC 68945	1.22
BR1	3.34
Brackish Water	1.01
Brine Water	1.15
BUSAN 1058	1.15
CCT SP Break 300	1.25
Chlorine Dioxide	1.20
Chlorine Dioxide Solution < 5000 ppm	1.00
Citric Acid	1.24
Clayplex 650	1.15
Clayseal 70	1.07
Clearal 267	1.09
Clearal 270a	1.06
CLO2	1.00
CoolSet	2.50
CorrSorb 3600	1.00
CRS 1080G	0.98
CS 4200	1.04
DDAC	0.94
Div. + 1357	1.25
Div. + 1370	1.25
DMUL 150	1.00
Econo DF-1	1.00
Econo-398	0.75
Econo-B648L	1.16
EconoCap-BR	2.50
EconoCap-HP	1.72
Econo-CI200	0.82
Econo-CS35	1.27
Econo-FR300	1.08
Econo-FR400	1.08
Econo-Max	1.06
Ecopol Breaker-BRL	1.15
Ecopol DBXL-90	1.16
Ecopol Gelbreak-EL2X	1.13
Ecopol-2000LMS	1.05
Ecopol-EC101	1.25
Ecopol-FEAC	1.14
Ecopol-HTSL	1.31
Ecopol-ME100	0.96
Ecopol-NE601	0.93
Ecopol-SI2000	1.08
EnviroSurf 6	0.96
FE-55	1.14

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

12/13/2024

Finicide GQ 510	1.02
FR-1000	1.05
FR-100AE	1.05
FR-1010	1.04
FR-2800C	1.20
FR-2800C	1.20
FR-30V	1.10
FR-516	1.09
Fresh Water	1.00
FWB100D	2.00
GB 300 E HT	1.72
GB-100 EHT	1.72
Greenhib 679	1.15
Gyptron T-475	1.04
Hi Flow 14	1.10
Hi Flow 5	1.11
HiRate Plus 1200	1.12
Hydrogen Chloride	1.05
ICC 400	1.22
Innoprop RC	2.55
ISR-100	1.02
KAI-12	0.82
KAI-18	0.90
KCC-9	1.11
KDF-1	1.01
KDF-3	1.01
KFE-14	1.01
KFEAC-30	1.13
KFR-12	1.10
KFR-32	1.05
KFR-36	1.04
KFR-38	1.11
KFR-40	1.02
KGBO-1	1.68
KpH-14L	1.28
KS-15	0.96
KSI-20	1.03
KSI-24W	1.00
KSV-17	1.13
KWBO-13	1.68
KWBO-2	1.68
KWG-111D	1.30
KWG-111L	1.05
KWG-7L	1.07
KWXB-12	1.00
KWXB-19	1.30
KWXB-20	1.14
LX-204E	1.05
Magnacide 575	1.33

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

12/13/2024

MBC 10:5	1.01
MC B-8614	1.04
MCS-376	1.00
MCS-376	1.00
Mega-Surf 101	0.96
Mega-Surf 102	1.01
MM-500	1.01
Myacide GA 25	1.06
NanoActiv	1.20
NBR-1	1.25
NBR-15	1.75
NBR-2	1.68
NCI-18	1.00
NCI-24	0.95
NCS-15	1.21
NE-1	0.94
NE-227	1.02
Newcide 669	1.03
NewStim Breaker MT	1.72
NewStim CC 329	1.19
NewStim SI 285	1.05
NFR-45	1.20
NFR-50	1.10
NFR-53	1.06
NFR-54	1.08
NFR-58	1.06
NFR-68X	1.10
NGA-10D	1.30
NGA-9D	1.50
NHV-37	1.05
NHV-49	0.98
NHV-50	1.05
NHV-53	1.10
NHV-75	1.05
NHV-83	1.10
NIC-20	1.05
NIC-21	1.18
NI-NE 200	1.00
nonActive Enhanced Bio-Lift 95	1.03
NPM-14	1.28
NPM-4	1.09
NRL-1W	0.96
NSA-3	1.10
NSI-24	1.02
NSI-32	1.05
NSI-38	1.08
NSI-38W	1.08
NSU-17	1.01
NSU-17	1.02

RECEIVED
Office of Oil and Gas
OCT 9 2024
U.S. Department of
Environmental Protection

12/13/2024

NSU-17W	1.01
NXL-31	1.35
Peroxyman	1.04
Peroxyman	1.04
Plexaid 680	1.08
Plexaid 870	0.81
Plexbor 101	1.30
Plexcide 15g	1.01
Plexgel 907L-EB	1.04
Plexgel Breaker 10L	1.00
Plexslick 953	1.11
Plexsurf 215ES	0.96
PolyBreak 5	1.06
Polyglide Xcel-250	1.04
Produced Water	1.10
Product 6191	1.02
Propel SSP	2.50
Proppant (Ceramic)	3.20
Proppant (Sand)	2.65
PSI	3.34
PureCide E	1.25
ReDirect-250CFL	1.00
ReDirect-500	1.24
RSA-2	1.12
S-212	1.05
Sabrechlor 25	1.23
SCAL18415A	1.14
Scale 803	1.03
ScaleBlok 10	1.03
ScaleGuard II	2.58
Scalesorb 12	2.10
Scalesorb 3	2.30
Scalesorb 4	1.90
Scalesorb 6	2.50
Scalesorb 7	2.10
Scaletrol 356	1.11
Scaletrol 720	1.18
SCALETROL 767W	1.01
SCW 6002	1.02
SCW358	1.15
Shrieve-Cide 423	1.16
SI-202F	1.25
SI-208	1.07
SI-219	1.02
SI-4010	1.03
SmartSurf 533	0.99
Sodium Hypochlorite 12.5%	1.27
Sodium Hypochlorite 12%	1.27
StimOil E51	0.98

RECEIVED
Office of Oil and Gas
OCT 9 2024
WV Department of
Environmental Protection

12/13/2024

StimOil ENX	0.98
StimOil Q906	0.91
Stimsolve FR 7205	1.08
Super LC	2.50
TechlubeQ	1.00
Technihib 604W	1.36
Technihib 767W	1.19
Tetra Scale 15-101	1.03
Tolcide TP5	1.00
TSI-2120	0.98
ULT130	1.00
VEFR-2005	1.12
V-Scale 400	1.15
Water	1.00
XC750	1.17
X-Cide 750	0.83
X-Corr LT	0.94
NHV-33	1.10
WSI3730	1.03
WSI3730W	1.03
CIA-12	1.04
StimStream FR 9800	1.08
Clearal 268	1.03
StimStream SC 405	1.10
Sand (100 Mesh Proppant)	2.65
Sand (40/70 White Proppant)	2.65
Scal Hib PE-18W	1.14
Plexcide 20W	1.18
NFR-56	1.08
NFR-64	1.20
FR-11	1.08
3rd Party FR	
3rd Party Biocide	
3rd Pary Scale Inhibitor	
TruSlick 18C	1.05
MSB-12	1.07
SI 9125	1.08

RECEIVED
Office of Oil and Gas

OCT 9 2024

WV Department of
Environmental Protection

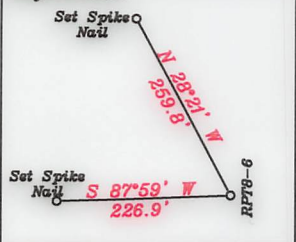
12/13/2024

Customer	Operator Number
Apache	A1210248
Centennial	C1411207
Chevron	C1210173
Elk River Resources	E247760
Encana	E1210354
Energen	E1210228
EnerPlus	E1210114
Hess	H1210210
Jagged Peak	J1411017
PetroHunt	P1210340
Sinclair	S1210406
Slawson	S1210051
SM Energy	S1210124
Triangle	T1210413
Whiting	W1210021
WPX	W1210128
Shell	S1210079
SM Energy	S1210124
Riley Permian	R2112261
Elevation	E1410904
Silverback	
Caza	C1811916
Continental	C1210054
Chesapeake	C1210063

RECEIVED
Oil and Gas
OCT 9 2024
Department of
Environmental Protection

12/13/2024

References:



Notes:

- 1. All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
- 2. Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.

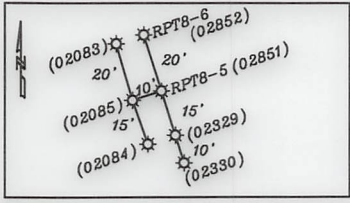
Asdrilled Leg
Proposed Leg

LEGEND

- 500' from Bore Path
- Well Lateral
- Unit Boundary
- Lease Tracts
- Surface Tracts
- Well Bore Tracts
- Utica Leg
- Marcellus Leg

NUMBER	DIRECTION	DISTANCE
L1	N38°14'W	1911.5'
L2	N59°17'W	2004.0'

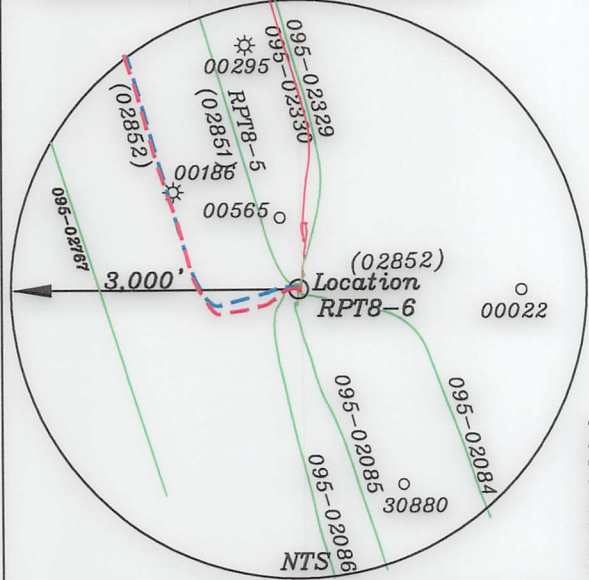
NUMBER	DIRECTION	DISTANCE
L3	N72°32'W	1232.4'



Top Hole
Geo NAD 83- 39.483222 N, 80.786038 W
UTM NAD 83(Meters)-4370424.36 N, 518400.85 E
UTM NAD 83(Feet)-14338633.92 N, 1700786.14 E

Landing Point
Geo NAD 83- 39.484192 N, 80.790222 W
UTM NAD 83(Meters)-4370531.09 N, 518040.64 E
UTM NAD 83(Feet)-14338984.09 N, 1699605.00 E

Bottom Hole
Geo NAD 83- 39.506628 N, 80.799514 W
UTM NAD 83(Meters)-4373019.27 N, 517235.95 E
UTM NAD 83(Feet)-14347147.38 N, 1699664.96 E



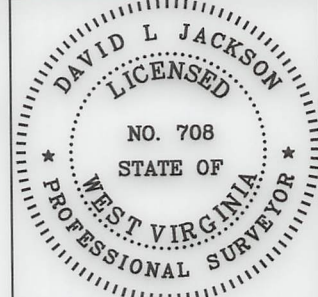
3. No water wells were found within 250' of the well location. No dwellings or buildings were found within 625' from the center of the proposed pad. No perennial streams are located within 100' of LOD. No producing trout stream is located within 300' of LOD.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
DRAWING NO. 1
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY 1 in 200
PROVEN SOURCE OF ELEVATION GPS
submeter unit

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) David L Jackson
R.P.E. _____ P.S. 708



STATE OF WEST VIRGINIA
Division of Environmental Protection
OFFICE OF OIL AND GAS

DATE May 09, 2024
OPERATOR'S WELL NO. RPT8-6
API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 095 PERMIT 02852
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X

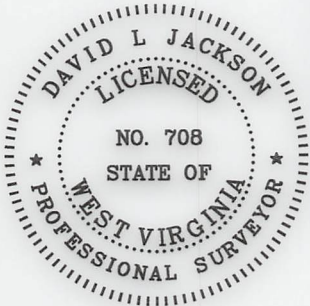
LOCATION: ELEVATION 1247.2' WATER SHED Big Run of Outlet Middle Island Creek (HUC-10)
DISTRICT McElroy COUNTY Tyler
QUADRANGLE Shirley 7 1/2'

SURFACE OWNER Jack A. Hair & Jeffrey K Hair ACREAGE 85.0 Ac.
OIL & GAS ROYALTY OWNER Jack A. Hair & Jeffrey K Hair LEASE ACREAGE 85.0 Ac.
LEASE NO. See Page 2

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW
FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ASDRILLED

PLUG AND ABANDON CLEAN OUT AND REPLUG
TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 6,899'; TMD = 15,989'
WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Deborah Broda-Morgan
ADDRESS 16 South Avenue W, Ste 118, Cranford NJ 07016 ADDRESS 429 Simonton Road, Ellenboro, WV 26346

Parcels within Unit Boundary				
Tags	Number	Tax Map -Parcel	Surface Owner	Acres
A	S1	05-02-17	JACK A HAIR & JEFFREY K HAIR	85
B	S2	05-02-02	JACK ALTON HAIR & JEFFREY HAIR	53.75
C	S3	02-23-04	JACK A HAIR & JEFFREY K HAIR	9.0
D	S4	02-23-27	LOUISA WEEKLEY, ESTATE	7.0
E	S4	02-23-01	MARGARET ADAMS	20.0
F	S6	02-23-02	DALE H & BETTY PARR	70.0
G	S7	02-17-56	J A WEEKLEY HEIRS, MONFORD NICHOLS & BETTY CUNNINGHAM	49.81
H	S8	02-16-34	J A WEEKLEY HEIRS, MONFORD NICHOLS & BETTY CUNNINGHAM	15.0
I	S9	02-16-33	JAMES A. WEEKLEY HRS	16.5
J	S10	02-17-57.2	RICHARD D & ERIKA L WILLIAMS	29.65
K	S11	02-17-57	RICHARD D & ERIKA L WILLIAMS	29.47
L	S12	02-16-31	CHRISTOPHER INVESMENTS, INC	60.0
Adjoining Parcels Ownership Table				
	Number	Tax Map -Parcel	Surface Owner	Acres
	S13	02-17-34	SAMUEL C & SHERRI L HAMMETT & ROBERT E HAMMETT	20.45
	S14	02-17-57.3	RICHARD D & ERIKA L WILLIAMS	31.22
	S15	02-17-57	RICHARD D & ERIKA L WILLIAMS	12.51
	S16	02-17-55	WANDA J PARR	34
	S17	02-23-08	DALE H & BETTY PARR	62
	S18	02-23-07	DALE H & BETTY PARR	46.5
	S19	02-23-05	JACK A HAIR & JEFFREY K HAIR	3
	S20	02-23-06	DALE H & BETTY PARR	18.62
	S21	02-23-6.1	DALE H & BETTY PARR	8.01
	S22	05-02-03	MICHAEL SHERWOOD	14.5
	S23	05-02-18	MICHAEL SHERWOOD	62.5
	S24	05-02-16	DUANE G NICHOLS	76.82
	S25	05-02-19	DUANE G NICHOLS, PHILLIP TODD NICHOLS & MORSE- BRANDT FAMILY TRUST	12.5
	S26	05-02-29.1	MICHAEL D MORSE TRUSTEE MORSE-BRANDT FAMILY TRUST	34.341
	S27	05-02-15	LEO W WIKER JOHN S WIKER & WILLIAM J WIKER	155.27
	S28	05-02-01	JACK HAIR & JEFFREY K HAIR	53.31
	S29	02-23-03	JACK A HAIR & JEFFREY K HAIR	9
	S30	02-22-13	CHRISTOPHER M N BLAKE	44.8
	S31	02-22-11	ANGELA KAY DEGUELLE & KATHY A BLAKE	45.983
	S32	02-22-10	LESLIE ANN HENDERSON	45.983
	S33	02-16-35	JAY A & NANCY L WRIGHT	40.81
	S34	02-16-32	JAMES A. WEEKLEY HRS	58
	S35	02-16-28	KENNETH & LORI TOMBLIN & MICHAEL TOMBLIN	290.32
	S36	02-16-30	CHRISTOPHER INVESTMENTS INC	40
	S37	02-17-63	ROBERTS EDNA	110
	S38	02-17-58	CHRISTOPHER INVESTMENTS INC	58.5
	S39	02-17-32	SHALYNN R MCGRAW	61.66

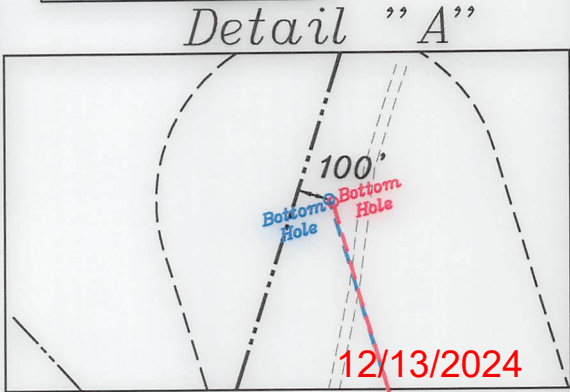


P.S.
708

David L Jackson

Top Hole
Geo NAD 83- 39.483222 N, 80.786038 W
UTM NAD 83(Meters)-4370424.33 N, 518400.63 E
UTM NAD 83(Feet)-14338633.81 N, 1700786.07 E
Landing Point
Geo NAD 83- 39.484004 N, 80.790150 W
UTM NAD 83(Meters)-4370510.30 N, 518046.82 E
UTM NAD 83(Feet)-14338915.89 N, 1699625.27 E
Bottom Hole
Geo NAD 83- 39.508620 N, 80.799536 W
UTM NAD 83(Meters)-4373018.37 N, 517234.05 E
UTM NAD 83(Feet)-14347144.45 N, 1696958.72 E

--- Asdrilled Leg
--- Proposed Leg



Jay Bee
Oil & Gas

DRILLING
into the future

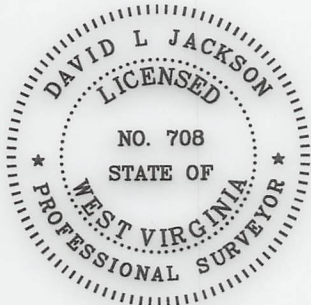
API #: 47-095-02852
WELL #: RPT8-6
DISTRICT: McELROY
COUNTY: TYLER
STATE: WV

WELL PLAT

PAGE 2 OF 3

DATE: 05/09/2024

Jay-Bee Oil & Gas, Inc. - RPT8-6 Permit - WW-6A1 Exhibit					
Tracts	District Tax Map/Parcel	JB Tract #	Lessor, Grantor, Etc.	Deed Book/Page	Acres
A	05-02-17	RPT8	Jeffrey A Hair	398/535	85.000
A	05-02-17	RPT8	Jack J Hair	398/528	85.000
B	05-02-02	T1-13	Drilling Appalachia Company	558/96	53.750
C	02-23-04	RPT11B	George Rex Arnette	381/618	9.000
D	02-23-27	T3109A2	Beulah Adams	420/651	7.000
E	02-23-01	T3109A1	Angie D Adams	405/802	20.000
F	02-23-02	T4002A	Cherie Lynn Howard Bennett	398/62	70.000
G	02-17-56	T3247	Robert L Archer	420/41	36.790
H	02-16-34	T3248A	Robert L Archer	385/354	7.990
I	02-16-33	T3248B	Betty Morehead	389/587	16.500
J	02-17-57.2	T3246A	Bounty Minerals, LLC	285/506	93.850
K	02-17-57	T3246A	Bounty Minerals, LLC	285/506	93.850
L	02-16-31	T3245	Bounty Minerals, LLC	TBR	60.000



P.S.
708

David L Jackson

12/13/2024



Jay Bee
Oil & Gas
DRILLING
into the future

API #: 47-095-02852
WELL #: RPT8-6
DISTRICT: McELROY
COUNTY: TYLER
STATE: WV

WELL PLAT
PAGE 3 OF 3
DATE: 05/09/2024