

Well Operator's Report of Well Work



Well Number: Van Winkle S-23HU

API: 47 - 051 - 02356

Submission:  Initial  Amended

Notes:

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02/23/2024

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

API 47-051-02356 County Marshall District Meade  
Quad Glen Easton 7.5' Pad Name Hunter Pethtel Field/Pool Name \_\_\_\_\_  
Farm name XcL Midstream Operating, LLC Well Number Van Winke S-23HU  
Operator (as registered with the OOG) EQT Production Company  
Address 400 Woodcliff Drive City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,403,550.28 Easting 523,385.80  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 753' 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)  
SOBM; Base oil, osmotic inhibitor, weighting agent, viscosifier, emulsifier, hardness buffer, fluid loss additive, LCM, Shale inhibitor, de-foamer, soaping agent, coagulant, flocculant; specific additives per WSSP and Permit.

Date permit issued 7/13/2021 Date drilling commenced 07/01/2023 spud: 11/24/2021 big rig: 3/14/2023 Date drilling ceased 6/2/2023  
Date completion activities began 07/01/2023 Date completion activities ceased 10/24/2023  
Verbal plugging (Y/N) N Date permission granted NA Granted by NA

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

Freshwater depth(s) ft 440' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 895' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 339' & 434' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

**APPROVED**

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WV Department of Environmental Protection

Reviewed by:  
*[Signature]*  
1/31/2024  
**02/23/2024**

API 47- 051 - 02356 Farm name XcL Midstream Operating, LLC Well number Van Winke S-23HU

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	38"	30"	110'	NEW	118.65#	N/A	Y
Surface	26"	20"	514'	NEW	106.5#	N/A	Y
Coal	26"	20"	514'	NEW	106.5#	N/A	Y
Intermediate 1	17 1/2"	13 3/8"	2,219'	NEW	54.5#	N/A	Y
Intermediate 2	12 3/8"	9 5/8"	10,030'	NEW	47#	N/A	Y
Intermediate 3							
Production	8 1/2"	5 1/2"	25,561'	NEW	23#	N/A	Y
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	A	380	15.6	1.21	459	0	8
Surface	A	956	15.6	1.18	1128	0	8
Coal	A	956	15.6	1.18	1128	0	8
Intermediate 1	A	1728	15.6	1.18	2039	0	8
Intermediate 2	A	3970	14.5	1.31	5200	0	8
Intermediate 3							
Production	A	3210	19.0	2.00	6420	0	8
Tubing							

Drillers TD (ft) 25,657' Loggers TD (ft) N/A  
 Deepest formation penetrated Utica Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 10,006'

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

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING 3 centralizers on surface casing at equal distance.

Intermediate - 1 centralizer every other joint.

Production - one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface,

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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API 47- 051 - 02356 Farm name XcL Midstream Operating, LLC Well number Van Winke S-23HU

**PERFORATION RECORD**

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
*	See Attached				

Please insert additional pages as applicable.

**STIMULATION INFORMATION PER STAGE**

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
*	See	Attached						

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Utica</u>	<u>10,964-11,320</u> TVD	<u>11,319-26,657</u> MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 7664 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 4677 mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water 16.9 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

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

Drilling Contractor Nabors Drilling USA  
 Address 505 West Greens Road, Suite 1000 City Houston State TX Zip 77067

Logging Company n/a  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company Halliburton Energy Services, Inc.  
 Address 121 Champion Way, Suite 200 City Canonsburg State PA Zip 15317

Stimulating Company ProFrac  
 Address 333 Shops Boulevard City Willow Park State TX Zip 76087

Please insert additional pages as applicable.

Completed by Adam Hughey Telephone 724-579-5475  
 Signature [Signature] Title Director of Completions Date 2024-01-10

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

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Well # VAN WINKLE S-23HU (L027207) Final Formations API# 47-051-02356				
Formation Name	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)	Drill Btm MD (ftKB)	Drill Btm (TVD) (ftKB)
Sand/Shale	1	1	339	339
Sewickley Coal	339	339	434	434
Pittsburgh Coal	434	434	440	440
Sand/Shale	440	440	1,477	1,477
Maxton	1,477	1,477	1,656	1,656
Big Lime	1,656	1,656	1,705	1,705
Big Injun	1,705	1,705	1,949	1,948
Weir	1,949	1,948	2,148	2,147
Berea	2,148	2,147	2,419	2,418
Gordon	2,419	2,418	2,491	2,490
Fifty Foot	2,491	2,490	3,083	3,082
Speechley	3,083	3,082	4,565	4,564
Benson	4,565	4,564	4,933	4,932
Alexander	4,933	4,932	5,580	5,578
Rhinestreet	5,580	5,578	6,019	6,017
Middlesex	6,019	6,017	6,095	6,093
Geneseo	6,095	6,093	6,122	6,120
Tully	6,122	6,120	6,158	6,156
Hamilton	6,158	6,156	6,227	6,225
Marcellus	6,227	6,225	6,277	6,275
Onondaga	6,277	6,275	6,514	6,512
Oriskany	6,514	6,512	6,636	6,634
Helderberg	6,636	6,634	7,011	7,009
Salina	7,011	7,009	8,182	8,149
Lockport	8,182	8,149	8,604	8,546
Rose Hill	8,604	8,546	8,921	8,845
Packer Shell	8,921	8,845	9,166	9,076
Clinton/Tuscarora	9,166	9,076	9,278	9,183
Juniata/Queenston	9,278	9,183	10,158	10,018
Reedsville	10,158	10,018	11,319	10,964
Utica	11,319	10,964	26,657	11,320

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# Perforation Data

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Van Winkle S-23HU Perf Table

Data Source: EQT Corporation

Stage_Number	Perf_Date	Depth_Bottom	Depth_Top	Shot_Count	Formation
2	09/06/2023	25327	25151	48	Utica
3	09/06/2023	25128	24952	48	Utica
4	09/06/2023	24929	24753	48	Utica
5	09/06/2023	24730	24554	48	Utica
6	09/07/2023	24531	24355	48	Utica
7	09/07/2023	24332	24156	48	Utica
8	09/07/2023	24133	23957	48	Utica
9	09/07/2023	23934	23758	48	Utica
10	09/08/2023	23735	23559	48	Utica
11	09/08/2023	23536	23360	48	Utica
12	09/08/2023	23337	23161	48	Utica
13	09/08/2023	23138	22962	48	Utica
14	09/09/2023	22939	22763	48	Utica
15	09/09/2023	22740	22564	48	Utica
16	09/09/2023	22541	22365	48	Utica
17	09/09/2023	22342	22166	48	Utica
18	09/09/2023	22143	21967	48	Utica
19	09/10/2023	21944	21768	48	Utica
20	09/10/2023	21745	21569	48	Utica
21	09/10/2023	21546	21370	48	Utica
22	09/10/2023	21347	21171	48	Utica
23	09/11/2023	21148	20972	48	Utica
24	09/11/2023	20949	20773	48	Utica
25	09/11/2023	20750	20574	48	Utica
26	09/11/2023	20551	20375	48	Utica
27	09/12/2023	20352	20176	48	Utica
28	09/12/2023	20153	19977	48	Utica
29	09/12/2023	19954	19778	48	Utica
30	09/12/2023	19755	19579	48	Utica
31	09/12/2023	19556	19380	48	Utica
32	09/13/2023	19357	19181	48	Utica
33	09/13/2023	19158	18982	48	Utica
34	09/13/2023	18959	18783	48	Utica
35	09/13/2023	18760	18584	48	Utica
36	09/13/2023	18561	18385	48	Utica
37	09/14/2023	18362	18186	48	Utica
38	09/14/2023	18163	17987	48	Utica
39	09/15/2023	17964	17788	48	Utica
40	09/15/2023	17765	17589	48	Utica
41	09/15/2023	17566	17390	48	Utica
42	09/16/2023	17367	17191	48	Utica
43	09/16/2023	17168	16992	48	Utica
44	09/16/2023	16969	16793	48	Utica
45	09/16/2023	16770	16594	48	Utica

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46 09/17/2023	16571	16395	48 Utica
47 09/17/2023	16372	16196	48 Utica
48 09/17/2023	16173	15997	48 Utica
49 09/17/2023	15974	15798	48 Utica
50 09/17/2023	15775	15599	48 Utica
51 09/17/2023	15576	15400	48 Utica
52 09/17/2023	15377	15201	48 Utica
53 09/18/2023	15178	15002	48 Utica
54 09/18/2023	14979	14803	48 Utica
55 09/18/2023	14780	14604	48 Utica
56 09/19/2023	14581	14405	48 Utica
57 09/19/2023	14382	14206	48 Utica
58 09/19/2023	14183	14007	48 Utica
59 09/20/2023	13984	13808	48 Utica
60 09/20/2023	13785	13609	48 Utica
61 09/20/2023	13586	13410	48 Utica
62 09/20/2023	13387	13211	48 Utica
63 09/21/2023	13188	13012	48 Utica
64 09/21/2023	12989	12813	48 Utica
65 09/21/2023	12790	12614	48 Utica
66 09/21/2023	12591	12415	48 Utica
67 09/21/2023	12392	12216	48 Utica
68 09/22/2023	12193	12017	48 Utica
69 09/22/2023	11994	11818	48 Utica
70 09/22/2023	11795	11619	48 Utica

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# Stimulation Data

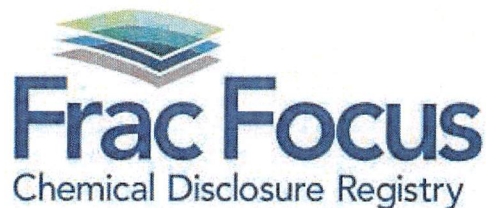
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Stimulation_Date	Stage_Number	Avg_Pump_Rate	Avg_Treatment_Pressure	Pressure_Breakdown	ISIP	Prop_Total	Volume_Total_Calc	Proppant_Type	Proppant_Mesh_Size
9/6/2023	1	88	12461	10896	8655	251000	7261	Sand	100 MESH;
9/6/2023	2	86	11750	8164	8307	503580	8310	Sand	100 MESH; 40/70;
9/6/2023	3	84	11769	8278	8454	500840	8243	Sand	100 MESH; 40/70;
9/7/2023	4	88	11881	11502	9327	499700	8918	Sand	100 MESH; 40/70;
9/7/2023	5	88	12067	8680	8908	503020	8170	Sand	100 MESH; 40/70;
9/7/2023	6	87	12021	8748	8611	500240	8214	Sand	100 MESH; 40/70;
9/7/2023	7	87	12128	8851	9365	501280	8187	Sand	100 MESH; 40/70;
9/8/2023	8	87	12339	8930	9113	505460	8177	Sand	100 MESH; 40/70;
9/8/2023	9	88	12408	9232	9144	498860	8172	Sand	100 MESH; 40/70;
9/8/2023	10	86	11982	8933	9701	500140	8204	Sand	100 MESH; 40/70;
9/8/2023	11	85	12106	10742	9115	500900	8325	Sand	100 MESH; 40/70;
9/9/2023	12	86	12636	9568	9607	498920	8216	Sand	100 MESH; 40/70;
9/9/2023	13	89	12214	8841	8431	500840	8220	Sand	100 MESH; 40/70;
9/9/2023	14	86	12051	9180	9456	504320	8172	Sand	100 MESH; 40/70;
9/9/2023	15	87	12010	9737	9652	501480	8259	Sand	100 MESH; 40/70;
9/9/2023	16	89	12060	10373	10134	500520	8082	Sand	100 MESH; 40/70;
9/10/2023	17	87	11990	9204	9289	505980	8190	Sand	100 MESH; 40/70;
9/10/2023	18	90	12396	9338	9588	509720	8205	Sand	100 MESH; 40/70;
9/10/2023	19	88	12343	9101	9514	501360	8274	Sand	100 MESH; 40/70;
9/10/2023	20	90	11983	10478	9150	498220	8143	Sand	100 MESH; 40/70;
9/10/2023	21	89	12063	9907	8500	500500	8042	Sand	100 MESH; 40/70;
9/11/2023	22	90	11813	9497	8564	500780	8139	Sand	100 MESH; 40/70;
9/11/2023	23	90	11451	8932	8941	501400	8137	Sand	100 MESH; 40/70;
9/11/2023	24	90	11897	9589	8548	500900	8153	Sand	100 MESH; 40/70;
9/12/2023	25	90	11901	9756	8176	506280	7957	Sand	100 MESH; 40/70;
9/12/2023	26	90	11417	9477	9490	505650	8015	Sand	100 MESH; 40/70;
9/12/2023	27	90	11214	9147	8648	505230	8008	Sand	100 MESH; 40/70;
9/12/2023	28	89	11200	8912	8803	499020	8127	Sand	100 MESH; 40/70;
9/12/2023	29	89	11261	9642	9968	501340	8113	Sand	100 MESH; 40/70;
9/13/2023	30	90	11182	8188	7973	505030	8216	Sand	100 MESH; 40/70;
9/13/2023	31	90	11095	8568	9582	507140	8370	Sand	100 MESH; 40/70;
9/13/2023	32	88	11094	9666	8628	499560	8025	Sand	100 MESH; 40/70;
9/13/2023	33	89	10908	8499	8373	496480	8121	Sand	100 MESH; 40/70;
9/13/2023	34	88	11100	8284	8983	499680	8030	Sand	100 MESH; 40/70;
9/14/2023	35	90	10974	8615	9774	498740	8208	Sand	100 MESH; 40/70;
9/14/2023	36	90	10765	8452	9936	498020	8045	Sand	100 MESH; 40/70;
9/14/2023	37	90	10820	9229	8393	500540	7990	Sand	100 MESH; 40/70;
9/15/2023	38	89	10949	9458	8542	502760	8088	Sand	100 MESH; 40/70;
9/15/2023	39	88	10690	9441	8709	498020	7940	Sand	100 MESH; 40/70;
9/16/2023	40	90	10600	9490	9866	500540	8089	Sand	100 MESH; 40/70;
9/16/2023	41	90	11013	9224	10055	501380	8000	Sand	100 MESH; 40/70;
9/16/2023	42	90	10988	8934	8536	502240	7886	Sand	100 MESH; 40/70;
9/16/2023	43	90	10873	8418	8761	499100	7969	Sand	100 MESH; 40/70;
9/17/2023	44	90	10847	9020	9037	500200	7955	Sand	100 MESH; 40/70;
9/17/2023	45	90	11037	7907	9689	502140	8084	Sand	100 MESH; 40/70;
9/17/2023	46	90	11246	8138	8438	500310	8024	Sand	100 MESH; 40/70;
9/17/2023	47	90	10909	8335	8638	502200	7867	Sand	100 MESH; 40/70;
9/17/2023	48	88	10793	9050	8903	498200	7937	Sand	100 MESH; 40/70;
9/17/2023	49	88	10884	9309	8975	500990	7981	Sand	100 MESH; 40/70;
9/18/2023	50	90	11140	9181	9822	499980	8015	Sand	100 MESH; 40/70;
9/18/2023	51	90	11406	9547	9381	500920	7867	Sand	100 MESH; 40/70;

9/18/2023	52	89	11427	9586	9811	502900	8110 Sand	100 MESH; 40/70;
9/18/2023	53	89	10988	9070	9479	501480	7835 Sand	100 MESH; 40/70;
9/19/2023	54	90	10961	9286	8638	500990	8087 Sand	100 MESH; 40/70;
9/19/2023	55	90	10964	9533	8486	502410	8421 Sand	100 MESH; 40/70;
9/19/2023	56	90	10979	8854	9527	505300	8121 Sand	100 MESH; 40/70;
9/20/2023	57	89	10716	9606	9917	502360	8044 Sand	100 MESH; 40/70;
9/20/2023	58	90	10855	9835	8199	502660	8136 Sand	100 MESH; 40/70;
9/20/2023	59	90	10755	9032	8461	497500	7819 Sand	100 MESH; 40/70;
9/20/2023	60	89	10531	8508	8425	500640	7839 Sand	100 MESH; 40/70;
9/21/2023	61	90	10747	9733	8810	502120	7919 Sand	100 MESH; 40/70;
9/21/2023	62	88	10778	8662	8544	498380	8011 Sand	100 MESH; 40/70;
9/21/2023	63	90	10738	8749	8793	501520	7950 Sand	100 MESH; 40/70;
9/21/2023	64	90	10653	8615	8310	500880	7573 Sand	100 MESH; 40/70;
9/21/2023	65	88	10458	9638	8706	499760	7911 Sand	100 MESH; 40/70;
9/22/2023	66	90	10536	8121	8612	500860	8421 Sand	100 MESH; 40/70;
9/22/2023	67	90	10255	7902	9585	507480	8081 Sand	100 MESH; 40/70;
9/22/2023	68	91	10236	9345	8907	507040	8083.69 Sand	100 MESH; 40/70;
9/22/2023	69	89	10255	8392	8994	504640	7972.69 Sand	100 MESH; 40/70;
9/22/2023	70	89	10246	8369	8774	495160	8153.868 Sand	100 MESH; 40/70;

## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	08/22/2023
Job End Date:	09/22/2023
State:	West Virginia
County:	Marshall
API Number:	47-051-02356-00-00
Operator Name:	EQT Production
Well Name and Number:	Van Winkle S-23HU
Latitude:	39.781577
Longitude:	-80.726903
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11322
Total Base Water Volume (gal)*:	25630048.416
Total Base Non Water Volume:	0



Water Source	Percent
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### Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	EQT	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	85.68449	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	13.96370	None
MX-5-3886	Multi-Chem	Bacterial treatment					
			Calcium nitrate	13477-34-4	100.00000	0.02948	None
7.5 HCl	Profrac	Acid					
			7.5 HCl	7647-01-0	7.50000	0.01851	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Copolymer of 2-propenamamide	Proprietary	30.00000	0.00927	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					

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			Petroleum Distillate	64742-47-8	20.00000	0.00412	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Methanol	67-56-1	60.00000	0.00235	None
MX-8-4543	Multi-Chem	Bacterial treatment					
			Contains no hazardous substances in concentrations above cut-off values according to the competent authority	Proprietary	100.00000	0.00192	None
ProFE 105	Profrac	Iron Control					
			Citric Acid	77-92-9	100.00000	0.00128	None
ProFE 105	Profrac	Iron Control					
			Citric Acid	77-92-9	100.00000	0.00128	None
15 HCl	Profrac	Acid					
			15 HCl	7647-01-0	15.00000	0.00118	None
ProHib 100	Profrac	Acid Corrosion Inhibitor					
			Methanol	67-56-1	90.00000	0.00048	None
ProFE 105	Profrac	Iron Control					
			2-hydroxypropane-1,2,3-tricarboxylic acid	77-92-9	60.00000	0.00046	None
ProFE 105	Profrac	Iron Control					
			2-hydroxypropane-1,2,3-tricarboxylic acid	77-92-9	60.00000	0.00046	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00004	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Oleic Acid Diethanolamide	93-83-4	2.00000	0.00004	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Phosphonic Acid Salt	Proprietary	5.00000	0.00002	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Ammonium chloride ((NH4)Cl)	12125-02-9	1.00000	0.00001	None
ProHib 100	Profrac	Acid Corrosion Inhibitor					

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			Propagyl Alcohol	107-19-7	5.00000	0.00000	None
ProHib 100	ProFrac	Acid Corrosion Inhibitor					
			Xylene	1330-20-7	5.00000	0.00000	None
ProHib 100	ProFrac	Acid Corrosion Inhibitor					
			Alcohols, C7-ISO, C8-RICH	68526-83-0	5.00000	0.00000	None
ProHib 100	ProFrac	Acid Corrosion Inhibitor					
			Imidazoline	61790-69-0	5.00000	0.00000	None
ProHib 100	ProFrac	Acid Corrosion Inhibitor					
			Isopropanol	67-63-0	5.00000	0.00000	None
ProHib 100	ProFrac	Acid Corrosion Inhibitor					
			ethylbenzene	100-41-4	1.00000	0.00000	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

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

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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