

Well Operator's Report of Well Work



Well Number: Haggard 16H (L003891)

API: 47 - 103 - 03532

Submission:  Initial  Amended

Notes: Original

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

API 47-103-03532 County Wetzel District Center  
Quad Littleton Pad Name Haggard Field/Pool Name N/A  
Farm name Amie Lee Henderson Well Number Haggard 16H (L003891)  
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 4,389,474.308 Easting 532,601.879  
Landing Point of Curve Northing 4,389,958.209 Easting 533,323.942  
Bottom Hole Northing 4,386,614.343 Easting 535,300.710

Elevation (ft) 1519' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

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

Mud Type(s) and Additive(s)

Synthetic Oil Based Mud 13.34 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide, partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 10/31/2022 Date drilling commenced 03/30/2023 Date drilling ceased 10/08/2023  
Date completion activities began 01/08/2024 Date completion activities ceased 04/10/2024  
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

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Freshwater depth(s) ft 437 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 2927 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 1307,1429 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by: [Signature]  
**APPROVED**  
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API 47- 103 - 03532 Farm name Amie Lee Henderson Well number Haggard 16H (L003891)

CASING STRINGS	Hole Size	Casing Size	Depth (GL)	New or Used	Grade wt/ft	Basket Depth(s) (GL)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30"	26"	40'	NEW	A-500 85.6#	N/A	Y
Surface	17-1/2"	13-3/8"	1465'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2897'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	6"	21,573'	NEW	P-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1208' GL, which is greater than 500' TVD above the producing formation. No issues during cement job.

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 (GL)	WOC (hrs)
Conductor	CLASS A	83	15.6	1.18	98	0	8+
Surface	CLASS L	1250	16.0	1.09	1362	0	8
Coal							
Intermediate 1	CLASS L	1006	15.6	1.14	1147	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3540	15.0	1.19	4212	1208'	8+
Tubing							

Drillers TD (ft) 21,592' Loggers TD (ft) N/A  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 1,604'

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 \_\_\_\_\_  
 CONDUCTOR- NONE  
 SURFACE- ON SHOE TRACK AND EVERY 500' TO SURFACE  
 INTERMEDIATE: ON SHOE TRACK AND EVERY 500' FEET TO SURFACE  
 PRODUCTION: ON SHOE TRACK AND EVERY OTHER JOINT TO 8874' AND EVERY JOINT TO 2254'

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 \_\_\_\_\_

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Drilling Contractor Falcon (Rig 25)  
Address 1120 US-119 City Indiana State PA Zip 15701

Logging Company Scientific Drilling International  
Address 124 Vista Drive City Charleroi State PA Zip 15022

Logging Company GyroData  
Address 73 Noblestown Road City Carnegie State PA Zip 15106

Drilling Contractor \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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*Handwritten signature and date*

Well # HAGGARD 16H (L003891) Final Formations API# 47-103-03531				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	437	437	1,307	1,307
Sewickley Coal	1,307	1,307	1,310	1,310
Sand/Shale	1,310	1,310	1,429	1,429
Pittsburgh Coal	1,429	1,429	1,438	1,438
Sand/Shale	1,438	1,438	2,771	2,767
Big Injun	2,771	2,767	2,896	2,891
Sand/Shale	2,896	2,891	3,045	3,039
Berea	3,045	3,039	3,286	3,277
Sand/Shale	3,286	3,277	3,404	3,393
Gantz	3,404	3,393	3,537	3,521
Sand/Shale	3,537	3,521	3,559	3,543
Fifty foot	3,559	3,543	3,597	3,579
Sand/Shale	3,597	3,579	3,643	3,623
Thirty foot	3,643	3,623	3,664	3,643
Sand/Shale	3,664	3,643	3,711	3,688
Bayard	3,711	3,688	3,803	3,774
Sand/Shale	3,803	3,774	4,155	4,090
Upper Speechley	4,155	4,090	4,216	4,142
Speechley	4,216	4,142	4,300	4,213
Balltown	4,300	4,213	4,630	4,485
Bradford	4,630	4,485	5,773	5,417
Benson	5,773	5,417	6,110	5,688
Alexander	6,110	5,688	6,569	6,059
Elk	6,569	6,059	8,027	7,225
Sonyea	8,027	7,225	8,198	7,359
Middlesex	8,198	7,359	8,249	7,397
Genesee	8,249	7,397	8,347	7,465
Geneseo	8,347	7,465	8,386	7,490
Tully	8,386	7,490	8,418	7,510
Hamilton	8,418	7,510	8,648	7,608
Marcellus	8,648	7,608	21,592	7,645

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# Perforation Data

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Stage No.	Perforation Date	Stage Perforated From TMD Ft.	Stage Perforated To TMD Ft.	# of Perforations/Stage	Formation(s)
2	02/02/2024	21489	21308	40	Marcellus
3	02/02/2024	21289	21107	40	Marcellus
4	02/02/2024	21088	20907	40	Marcellus
5	02/02/2024	20888	20706	40	Marcellus
6	02/02/2024	20687	20506	40	Marcellus
7	02/03/2024	20487	20305	40	Marcellus
8	02/03/2024	20286	20105	40	Marcellus
9	02/03/2024	20086	19904	40	Marcellus
10	02/03/2024	19885	19704	40	Marcellus
11	02/03/2024	19685	19503	40	Marcellus
12	02/04/2024	19484	19303	40	Marcellus
13	02/04/2024	19284	19102	40	Marcellus
14	02/04/2024	19083	18902	40	Marcellus
15	02/04/2024	18883	18701	40	Marcellus
16	02/04/2024	18682	18501	40	Marcellus
17	02/05/2024	18482	18300	40	Marcellus
18	02/05/2024	18281	18100	40	Marcellus
19	02/05/2024	18081	17899	40	Marcellus
20	02/05/2024	17880	17699	40	Marcellus
21	02/05/2024	17680	17498	40	Marcellus
22	02/05/2024	17479	17298	40	Marcellus
23	02/06/2024	17279	17097	40	Marcellus
24	02/06/2024	17078	16897	40	Marcellus
25	02/06/2024	16878	16696	40	Marcellus
26	02/06/2024	16677	16496	40	Marcellus
27	02/06/2024	16477	16295	40	Marcellus
28	02/07/2024	16276	16095	40	Marcellus
29	02/07/2024	16076	15894	40	Marcellus
30	02/07/2024	15875	15694	40	Marcellus
31	02/07/2024	15675	15493	40	Marcellus
32	02/08/2024	15474	15293	40	Marcellus
33	02/08/2024	15274	15092	40	Marcellus
34	02/08/2024	15073	14892	40	Marcellus
35	02/08/2024	14873	14691	40	Marcellus
36	02/08/2024	14672	14491	40	Marcellus
37	02/09/2024	14472	14290	40	Marcellus
38	02/09/2024	14271	14090	40	Marcellus
39	02/09/2024	14071	13889	40	Marcellus
40	02/09/2024	13870	13689	40	Marcellus
41	02/09/2024	13670	13488	40	Marcellus
42	02/10/2024	13469	13288	40	Marcellus
43	02/10/2024	13269	13087	40	Marcellus
44	02/10/2024	13068	12887	40	Marcellus

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45	02/10/2024	12868	12686	40	Marcellus
46	02/10/2024	12667	12486	40	Marcellus
47	02/11/2024	12467	12285	40	Marcellus
48	02/11/2024	12266	12085	40	Marcellus
49	02/11/2024	12066	11884	40	Marcellus
50	02/11/2024	11865	11684	40	Marcellus
51	02/11/2024	11665	11483	40	Marcellus
52	02/11/2024	11464	11283	40	Marcellus
53	02/12/2024	11264	11082	40	Marcellus
54	02/12/2024	11063	10882	40	Marcellus
55	02/12/2024	10863	10681	40	Marcellus
56	02/12/2024	10662	10481	40	Marcellus
57	02/12/2024	10462	10280	40	Marcellus
58	02/13/2024	10261	10080	40	Marcellus
59	02/13/2024	10061	9879	40	Marcellus
60	02/13/2024	9860	9679	40	Marcellus
61	02/13/2024	9660	9478	40	Marcellus
62	02/13/2024	9459	9278	40	Marcellus
63	02/13/2024	9259	9077	40	Marcellus
64	02/14/2024	9058	8877	40	Marcellus
65	02/14/2024	8858	8676	40	Marcellus

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# Stimulation Data

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Stage #	Stimulation 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)
1	02/02/2024	90	9057	7114	3821	176157	4307	
2	02/02/2024	99	8739	7068	4589	440091	10307	
3	02/02/2024	99	8686	6801	4852	440003	10352	
4	02/02/2024	98	8884	6682	4339	439909	10266	
5	02/03/2024	95	8921	6800	4815	440126	10248	
6	02/03/2024	93	9157	6761	4593	440065	10192	
7	02/03/2024	98	9027	6717	4761	440075	10183	
8	02/03/2024	94	9264	6594	4783	439964	10167	
9	02/03/2024	97	8652	6562	5002	440017	10150	
10	02/04/2024	98	9028	6546	4765	440078	10155	
11	02/04/2024	90	9143	6466	4802	440125	10149	
12	02/04/2024	99	8852	6341	4744	440078	10142	
13	02/04/2024	100	8870	6019	4800	440059	10114	
14	02/04/2024	100	8711	6267	4772	440008	10124	
15	02/04/2024	99	8869	6213	4702	440095	10121	
16	02/05/2024	100	8866	6590	4528	440176	10116	
17	02/05/2024	97	9081	6572	4485	440121	10091	
18	02/05/2024	100	8732	6766	4841	439980	10079	
19	02/05/2024	100	8618	6252	4506	440074	10086	
20	02/05/2024	100	8494	6828	4759	440062	10078	
21	02/06/2024	100	8630	6749	5191	439976	10065	
22	02/06/2024	98	8615	6685	4606	440066	10075	
23	02/06/2024	100	8565	6614	4517	440254	10079	
24	02/06/2024	100	8590	6436	4484	440068	10109	
25	02/06/2024	100	8452	6521	4694	440051	10042	
26	02/07/2024	97	8774	6618	4792	440036	10038	
27	02/07/2024	100	8863	6463	4754	440116	10027	
28	02/07/2024	90	8876	6723	4831	439406	10055	
29	02/07/2024	99	8845	6904	4806	440120	10027	
30	02/08/2024	86	9091	6591	4829	440054	10011	
31	02/08/2024	100	8516	6482	4856	440201	9977	
32	02/08/2024	99	8620	6325	4914	440069	9977	
33	02/08/2024	100	8265	6464	4762	440305	9955	
34	02/08/2024	99	8391	6786	4922	440112	9952	
35	02/09/2024	100	8592	6763	5003	440160	9949	
36	02/09/2024	100	8539	6806	4592	440267	9935	
37	02/09/2024	100	8518	6772	4721	440309	9926	
38	02/09/2024	99	8604	6503	4646	439997	9927	
39	02/09/2024	99	8351	6418	4685	440040	9907	
40	02/09/2024	99	8555	6355	4550	439982	9888	
41	02/10/2024	100	8453	6555	4512	440649	9897	
42	02/10/2024	100	8357	6662	4601	441039	9897	
43	02/10/2024	99	8545	5620	4637	440127	9893	

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44	02/10/2024	100	8498	6809	4929	439959	9855
45	02/11/2024	99	8376	6721	4553	440293	9975
46	02/11/2024	97	8702	6359	4365	440302	9866
47	02/11/2024	100	8086	4417	4600	440303	9833
48	02/11/2024	100	8491	6670	4346	439114	9802
49	02/11/2024	100	8322	6233	4611	440065	9793
50	02/11/2024	99	8220	6289	4653	440124	9785
51	02/12/2024	100	8227	6345	4422	440134	9812
52	02/12/2024	99	8454	6534	4394	440252	9802
53	02/12/2024	100	8104	6039	4383	440111	9782
54	02/12/2024	100	7959	6489	5200	439976	9758
55	02/12/2024	99	8039	6407	4857	439913	9764
56	02/13/2024	99	8288	6383	4594	440315	9776
57	02/13/2024	100	8131	6375	4666	440373	9848
58	02/13/2024	100	8081	6370	4370	440375	9775
59	02/13/2024	99	8264	6487	4689	439996	9726
60	02/13/2024	93	8503	6202	4396	439985	9726
61	02/13/2024	99	8035	6212	4571	440459	9743
62	02/14/2024	99	8235	6270	4651	440266	9741
63	02/14/2024	100	8144	6272	4507	440175	9731
64	02/14/2024	98	8232	6527	4422	439989	9763
65	02/14/2024	100	7961	6240	4586	440002	9681

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	01/08/2024
Job End Date:	03/20/2024
State:	West Virginia
County:	Wetzel
API Number:	47-103-03532-00-00
Operator Name:	EQT Production
Well Name and Number:	Haggard 16H
Latitude:	39.654446
Longitude:	-80.619974
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7673
Total Base Water Volume (gal)*:	26979624
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	88.68129	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	11.16395	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Copolymer of 2-propenamides	Proprietary	30.00000	0.00929	None
Clearal 268	ChemStream	Biocide					
			Non-hazardous substances	Proprietary	80.00000	0.00900	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			Non-hazardous substances	Proprietary	90.00000	0.00767	None
StimSTREAM	ChemStream	Friction					

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FR 9800		Reducer					
			Petroleum Distillate	64742-47-8	20.00000	0.00413	None
Enviro-Syn HCR-7000-WL	Fluid Energy Group Ltd.	Synthetic Acid					
			Proprietary	Proprietary	20.00000	0.00112	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00056	None
Enviro-Syn HCR-7000-WL	Fluid Energy Group Ltd.	Synthetic Acid					
			Proprietary	Proprietary	10.00000	0.00028	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid) (BHMT)	34690-00-1	10.00000	0.00010	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
Clearal 268	ChemStream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00001	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Ammonium chloride ((NH4)Cl)	12125-02-9	1.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Ethanol	64-17-5	1.50000	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%

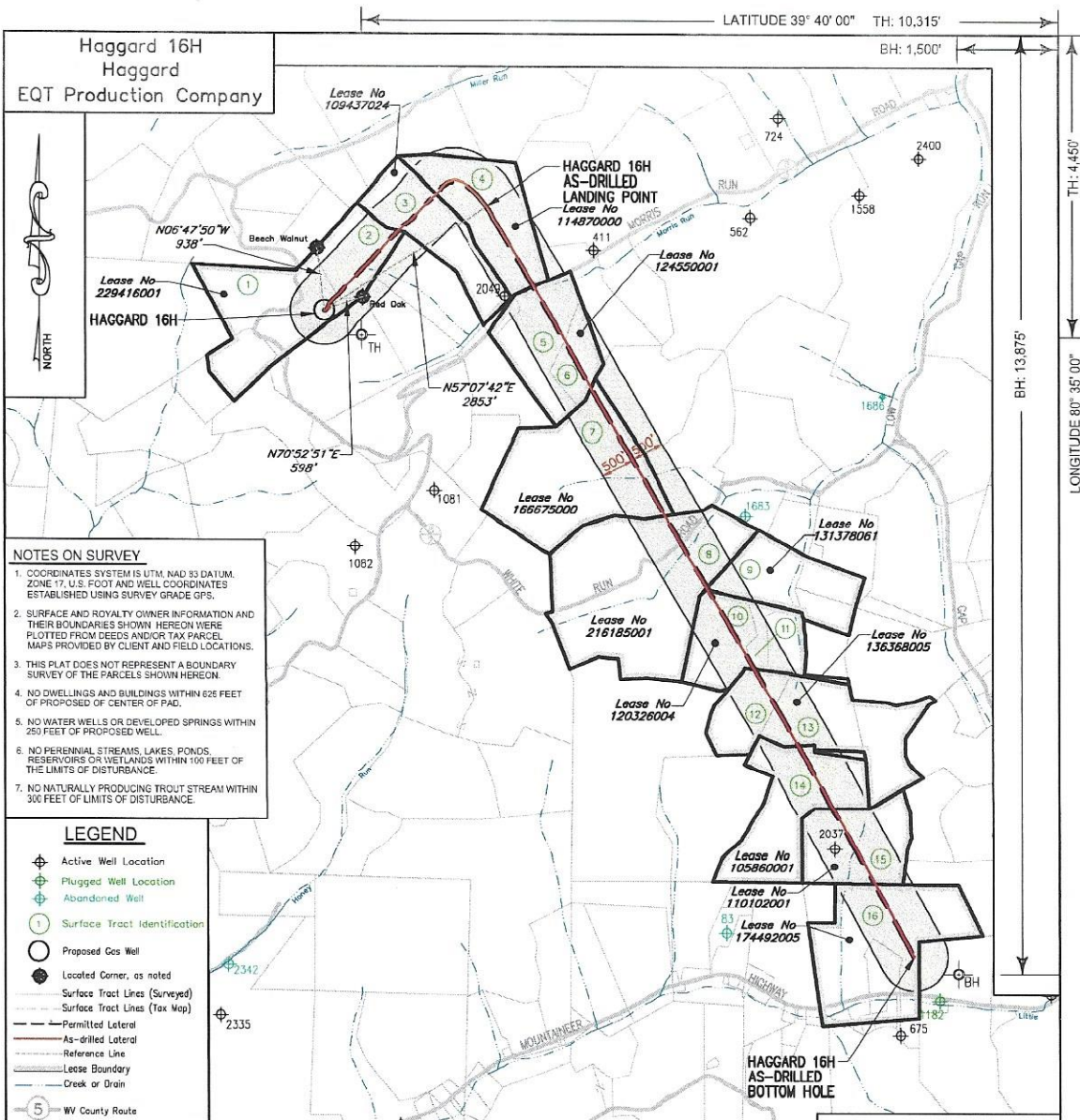
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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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**NOTES ON SURVEY**

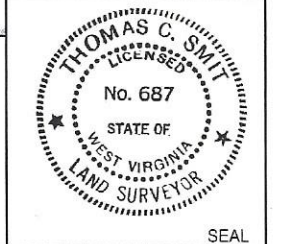
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- Active Well Location
  - Plugged Well Location
  - Abandoned Well
  - Surface Tract Identification
  - Proposed Gas Well
  - Located Corner, as noted
  - Surface Tract Lines (Surveyed)
  - Surface Tract Lines (Tax Map)
  - Permitted Lateral
  - As-drilled Lateral
  - Reference Line
  - Lease Boundary
  - Creek or Drain
  - WV County Route
  - WV State Route



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

*Thomas C. Smit*  
L. L. S. 687



FILE NO:  
DRAWING NO:  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: OCTOBER, 12 20 23  
OPERATORS WELL NO: Haggard 16H  
API WELL NO: 47 - 103 - 03532  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION ELEVATION: 1519' WATERSHED: LOWER WEST VIRGINIA FORK FISH CREEK QUADRANGLE: LITTLETON  
 DISTRICT: Center COUNTY: Wetzel  
 SURFACE OWNER: Amie Lee Henderson ACREAGE: 45.5 ±  
 ROYALTY OWNER: Blackrock Enterprises LLC, et al. LEASE NO: 229416001 ACREAGE: 84.94 ±  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,624'  
 WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C Mallow  
 ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive  
 Canonsburg, PA 15317 Clarksburg, WV 26301

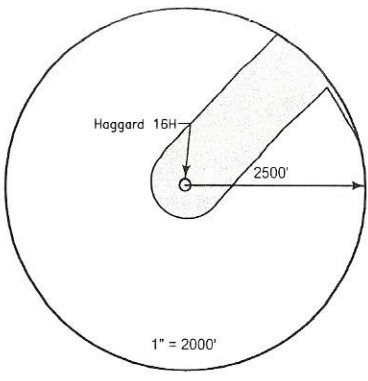
RECEIVED  
Office of Oil and Gas  
JUL 08 2024  
WV Department of Environmental Protection

08/16/2024

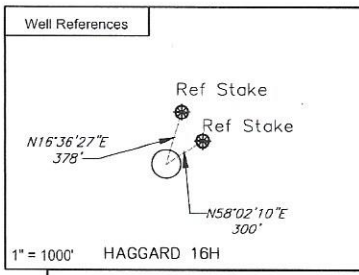


Haggard 16H  
Haggard  
EQT Production Company

Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	10	36.0	Wetzel	Center	Amie Lee Henderson	45.50
2	10	27.0	Wetzel	Center	Scott L. Musgrave	35.00
3	10	28.0	Wetzel	Center	Calvin T. JR., & Monica L. Morris	47.50
4	10	29.0	Wetzel	Center	Rebecca Myers	48.75
5	10	41.0	Wetzel	Center	David Morris & Lisa Ballville	29.06
6	10	55.0	Wetzel	Center	Patrick Morris	15.00
7	10	56.0	Wetzel	Center	Patrick L. Morris	93.75
8	14	10.0	Wetzel	Center	Johnny Kenneth & Debrah K. Greathouse	122.00
9	15	8.0	Wetzel	Center	David W. & Rachel M. Morris	25.00
10	15	66.0	Wetzel	Center	Owen E. & Saloma D. Schmucker	28.87
11	15	10.0	Wetzel	Center	Owen E. & Saloma D. Schmucker	6.25
12	15	28.1	Wetzel	Center	Owen E. & Saloma D. Schmucker	22.66
13	15	28.0	Wetzel	Center	Owen E. & Saloma D. Schmucker	29.00
14	15	43.0	Wetzel	Center	Donnie P. & Donna Kirkpatrick	62.81
15	15	44.0	Wetzel	Center	John R. & Phyllis R. Bohrer	43.80
16	15	56.0	Wetzel	Center	John R. & Phyllis R. Bohrer	42.75



Lease	Owner	Acres
229416001	Blackrock Enterprises LLC, et al.	84.94 ac of 198.1275 ac
109437024	Rusty Lee Morris, et al.	47.5 ac
114870000	AMP IV, LP, et al.	48.75 ac
124550001	Cynthia A. Quigley, et al.	49.25 ac
166675000	AMP IV, LP, et al.	93.75 ac
216185001	Drilling Appalachian Corporation, et al.	122 ac
131378061	Jaqueline Ziarko, et al.	45.9 ac
120326004	Owen E. Schmucker and Saloma D. Schmucker, et al.	52.45 ac
136368005	Owen E. Schmucker and Saloma D. Schmucker, et al.	77.41875 ac
105860001	Stone Hill Minerals Holdings, LLC, et al.	1,694.69 ac
110102001	Acropolis, Inc., et al.	43.8 ac
174492005	Robert L. Roksandich, et al.	72.085 ac

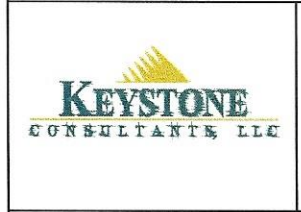
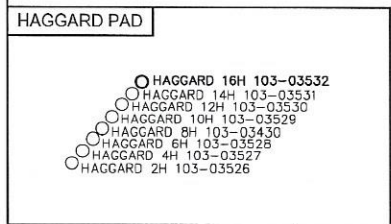


Notes:  
**HAGGARD 16H coordinates are**  
 NAD 27 N: 422,411.672 E: 1,684,613.723  
 NAD 27 Lat: 39.654365 Long: -80.620163  
 NAD 83 UTM N: 4,389,474.308 E: 532,601.879

**HAGGARD 16H Landing Point coordinates are**  
 NAD 27 N: 423,959.920 E: 1,687,009.540  
 NAD 27 Lat: 39.658697 Long: -80.611723  
 NAD 83 UTM N: 4,389,958.209 E: 533,323.942

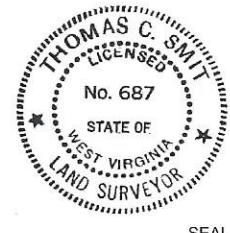
**HAGGARD 16H Bottom Hole coordinates are**  
 NAD 27 N: 412,879.800 E: 1,693,313.271  
 NAD 27 Lat: 39.628469 Long: -80.588658  
 NAD 83 UTM N: 4,386,614.343 E: 535,300.710

West Virginia Coordinates system of 1927 (North Zone)  
 based upon Differential GPS Measurements  
 Plat orientation. Corner and well ties are based upon the grid north meridian.  
 Well location references are based upon the grid north meridian.  
 UTM coordinates are NAD83, Zone 17, Meters.



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

*Thomas C. Smith*  
 L. L. S. 687



FILE NO:  
 DRAWING NO:  
 SCALE: 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: OCTOBER, 12 20 23  
 OPERATORS WELL NO: Haggard 16H  
 API WELL NO  
 47 - 103 - 03532  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION ELEVATION: 1519' WATERSHED: LOWER WEST VIRGINIA FORK FISH CREEK QUADRANGLE: LITTLETON  
 DISTRICT: Center COUNTY: Wetzel

SURFACE OWNER: Amie Lee Henderson ACREAGE: 45.5 ±  
 ROYALTY OWNER: Blackrock Enterprises LLC, et al. LEASE NO: 229416001 ACREAGE: 84.94 ±

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,624'

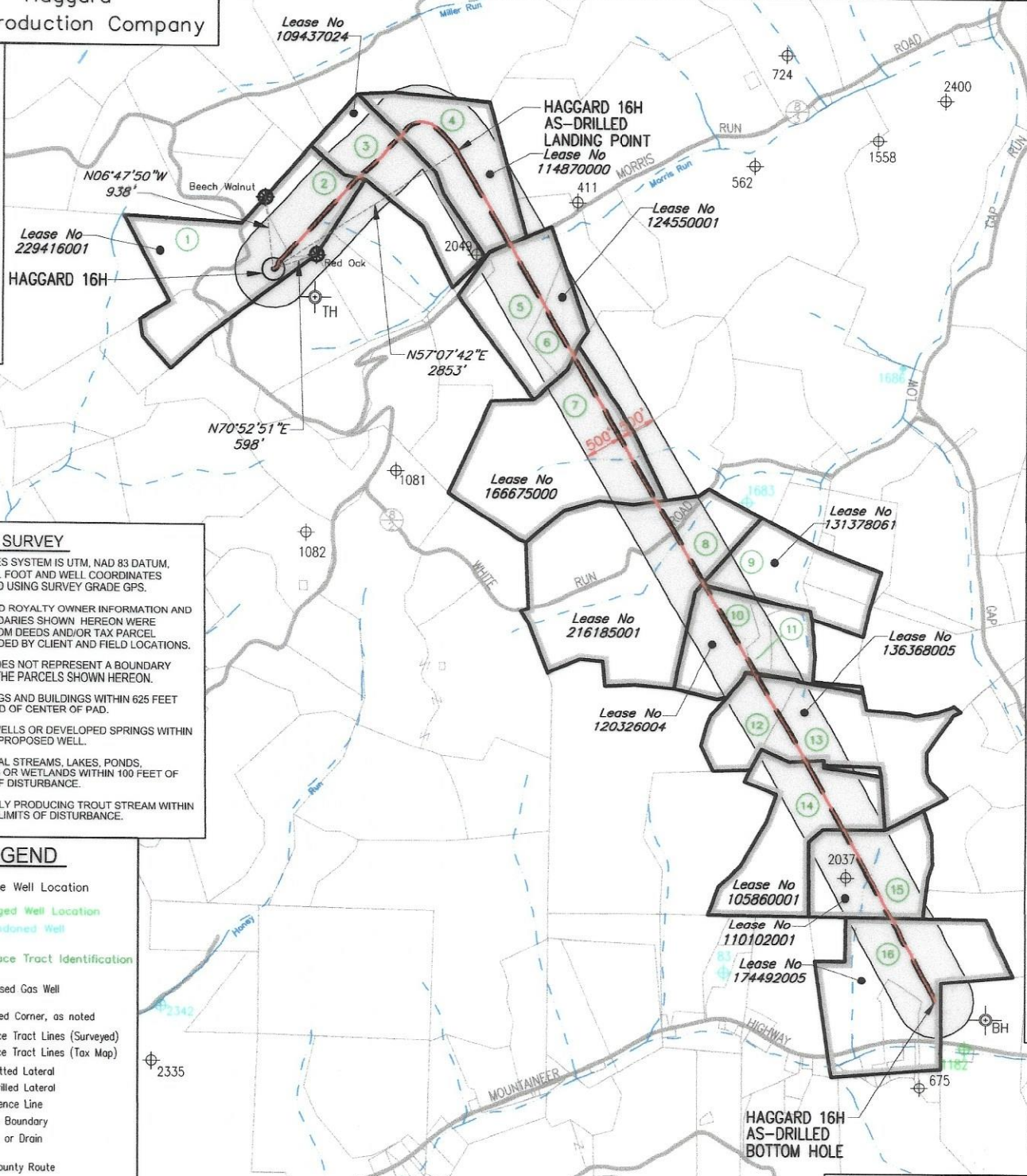
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C Mallow  
 ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive  
 Canonsburg, PA 15317 Clarksburg, WV 26301

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 JUL 08 2024  
 WV Department of Environmental Protection

08/16/2024



Haggard 16H  
Haggard  
EQT Production Company



- NOTES ON SURVEY**
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17. U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
  - SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
  - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
  - NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
  - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
  - NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
  - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- ⊕ Active Well Location
  - ⊕ Plugged Well Location
  - ⊕ Abandoned Well
  - ① Surface Tract Identification
  - Proposed Gas Well
  - Located Corner, as noted
  - Surface Tract Lines (Surveyed)
  - - - Surface Tract Lines (Tax Map)
  - - - Permitted Lateral
  - - - As-drilled Lateral
  - - - Reference Line
  - ▬ Lease Boundary
  - Creek or Drain
  - ⑤ WV County Route
  - ⑤ WV State Route

(⊕) Denotes Location of Well on United States Topographic Maps



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

*L. L. S.*  
L. L. S. 687



SEAL

FILE NO: \_\_\_\_\_  
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 STATE COUNTY PERMIT

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 LOCATION ELEVATION: 1519' WATERSHED: LOWER WEST VIRGINIA FORK FISH CREEK QUADRANGLE: LITTLETON  
 DISTRICT: Center COUNTY: Wetzell  
 SURFACE OWNER: Amie Lee Henderson ACREAGE: 88.16 ±  
 ROYALTY OWNER: Blackrock Enterprises LLC, et al. LEASE NO: 229416001 ACREAGE: 84.94 ±  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
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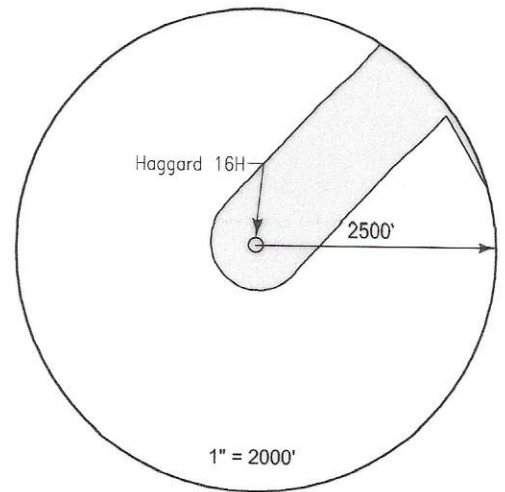
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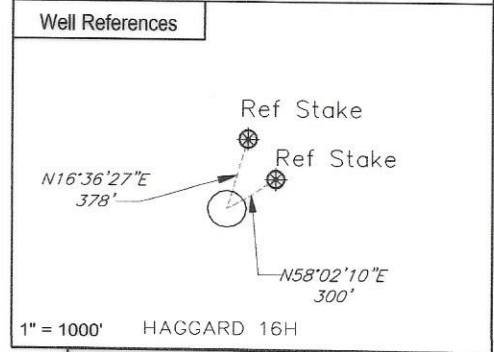


Haggard 16H  
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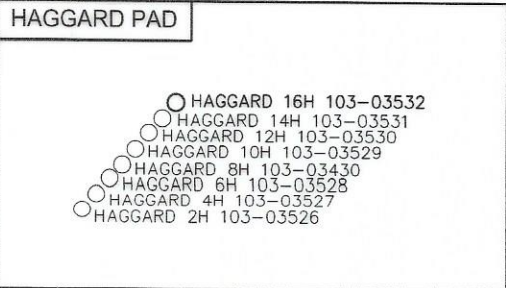
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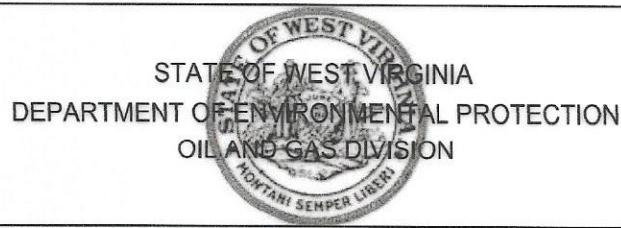


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*Thomas C. Smit*  
L. L. S. 687



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