

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

NOV 12 2024

WV Department of
Environmental Protection

API 47-051-02286 County Marshall District Meade
Quad Glen Easton 7.5' Pad Name KNOB CREEK Field/Pool Name N/A
Farm name David Lee Franklin Well Number Knob Creek S-10HM (L018005)
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 4,402,289.21 Easting 525,231.36
Landing Point of Curve Northing 4,402,325.0 Easting 525,780.1
Bottom Hole Northing 4,399,834.3 Easting 527,221.3

Elevation (ft) 737' 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 13.73 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 12/03/2019 Date drilling commenced 08/08/2020 Date drilling ceased 10/19/2023
Date completion activities began 05/05/2024 Date completion activities ceased 08/13/2024
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 380' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 885' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 292', 374' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

APPROVED

Reviewed by:


02/07/2025
STRADLER
12/23/2024

API 47-051 - 02286 Farm name David Lee Franklin Well number Knob Creek S-10HM (L018005)

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	38"	30"	120'	NEW	118.65#	N/A	Y
Surface	17-1/2"	13-3/8"	466'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2281'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	5-1/2"	16,390'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1377' 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 ³ /sks)	Volume (ft ³)	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	400	15.6	1.21	484	0	8+
Surface	CLASS A	704	15.6	1.18	830	0	8
Coal							
Intermediate 1	CLASS A	790	15.6	1.18	932	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3005	15.0	1.18	3546	1377'	8+
Tubing							

Drillers TD (ft) 16,408' Loggers TD (ft) N/A
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 577'

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

WV Department of Environmental Protection
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 48' _____

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 _____

02/07/2025

API 47- 051 - 02286 Farm name David Lee Franklin Well number Knob Creek S-10HM (L018005)

Drilling Contractor Falcon (Rig 24)
Address 1120 US-119 City Indiana State PA Zip 15701

Logging Company Nzone Guidance, LLC
Address 140 Falcon Lane City Liberty Hill State TX Zip 78642

Logging Company _____
Address _____ City _____ State _____ Zip _____

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

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Well # KNOB CREEK S-10HM (L018005) Final Formations API# 47-051-02286

Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	292	292
Sewickley Coal	292	292	294	294
Sand/Shale	294	294	374	374
Pittsburgh Coal	374	374	380	380
Sand/Shale	380	380	1,509	1,509
Big Lime	1,509	1,509	1,711	1,710
Big Injun	1,711	1,710	1,740	1,739
Sand/Shale	1,740	1,739	2,095	2,093
Berea	2,095	2,093	2,357	2,355
Sand/Shale	2,357	2,355	2,359	2,357
Gordon	2,359	2,357	2,437	2,434
50F	2,437	2,434	2,508	2,505
Sand/Shale	2,508	2,505	3,008	3,004
Speechley	3,008	3,004	4,852	4,705
Alexander	4,852	4,705	5,302	5,091
Elks	5,302	5,091	6,217	5,893
Sonyea	6,217	5,893	6,330	5,981
Middlesex	6,330	5,981	6,364	6,006
Genesee	6,364	6,006	6,426	6,048
Geneseo	6,426	6,048	6,478	6,080
Tully	6,478	6,080	6,529	6,108
Hamilton	6,529	6,108	6,742	6,193
Marcellus	6,742	6,193	16,408	6,448

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**KNOB CREEK S LEASE
WELL 10HM
EQT PRODUCTION CO.**

10,136' T.H.

4,353' B.H.

B.H.
A.D.

T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°45'00"

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C. (FT)	N. 464,904.41	E. 1,629,692.01
NAD'83 GEO.	LAT-(N) 39.770160	LONG-(W) 80.705397
NAD'83 UTM (M)	N. 4,402,289.21	E. 525,231.36

LANDING POINT

NAD'83 S.P.C. (FT)	N. 465,012.8	E. 1,631,480.7
NAD'83 GEO.	LAT-(N) 39.770523	LONG-(W) 80.699039
NAD'83 UTM (M)	N. 4,402,331.3	E. 525,775.7

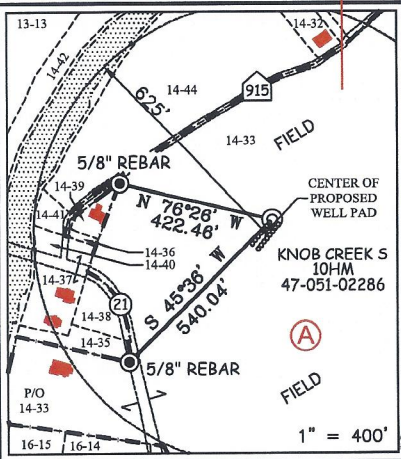
BOTTOM HOLE

NAD'83 S.P.C. (FT)	N. 456,730.5	E. 1,636,112.6
NAD'83 GEO.	LAT-(N) 39.747956	LONG-(W) 80.682174
NAD'83 UTM (M)	N. 4,399,831.7	E. 527,229.0

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°40'00"
738' B.H.
7,834' T.H.

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-13-13	MARGARET K. FOX - LIFE	15.513
9-14-28	CHARLES R. SCHELLHASE, ET UX	3.029
9-14-29	ANDREW PASOULETOS, ET UX	0.209
9-14-29.1	ANDREW PASOULETOS, ET UX	1.171
9-14-30	WILLIAM C. GROFF, ET UX	0.35
9-14-31	WILFORD F. NELSON, JR., ET UX	0.954
9-14-32	TWILA C. COFFIELD	0.583
9-14-32.1	TWILA C. COFFIELD	0.184
9-14-35	PAUL G. FOX	0.338
9-14-36	MARGARET FOX - LIFE	1600 SQ. FT.
9-14-37	MARGARET FOX - LIFE	LOT (ASSD)
9-14-38	MARGARET FOX - LIFE	0.631
9-14-39	MARGARET FOX - LIFE	8675 SQ. FT.
9-14-40	MARGARET FOX - LIFE	19,560 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9165 SQ. FT.
9-14-42	JOHN C. LAGOS, ET UX	1.87
9-14-44	DAVID LEE FRANKLIN	2.913
9-14-54	RICHARD L. HARVETH, ET UX	1.649
9-16-14	LYNN CAMP METHODIST CHURCH	0.762
9-16-15.1	ERIC J. YOUNG	1.98

REFERENCES



T.H.
A.D.

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12 VanBuren Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.348.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slswv.com

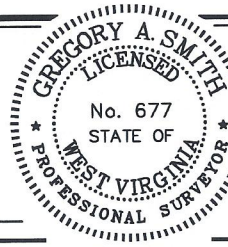
NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PLAT UPDATED TO SHOW AS-DRILLED PATH. AS-DRILLED DATA PROVIDED BY EQT PRODUCTION CO.

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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S.
677

Gregory A. Smith



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

DATE JULY 27, 20 18

REVISED OCTOBER 30, 2023

OPERATORS WELL NO. KNOB CREEK S-10HM

API WELL NO. 47 - 051 - 02286
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8789P10HM ASDRILLED.dwg
KNOB CREEK S-10HM-REV3

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS



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

LOCATION: ELEVATION 737.50' WATERSHED FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE B.H. - WILEYVILLE 7.5'
T.H. - GLEN EASTON 7.5'

SURFACE OWNER DAVID LEE FRANKLIN ACREAGE 65.824±

ROYALTY OWNER DAVID LEE FRANKLIN, ET AL - SEE WW-6A1 ACREAGE 65.824±

PROPOSED WORK: LEASE NO. SEE WW-6A1

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD

FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

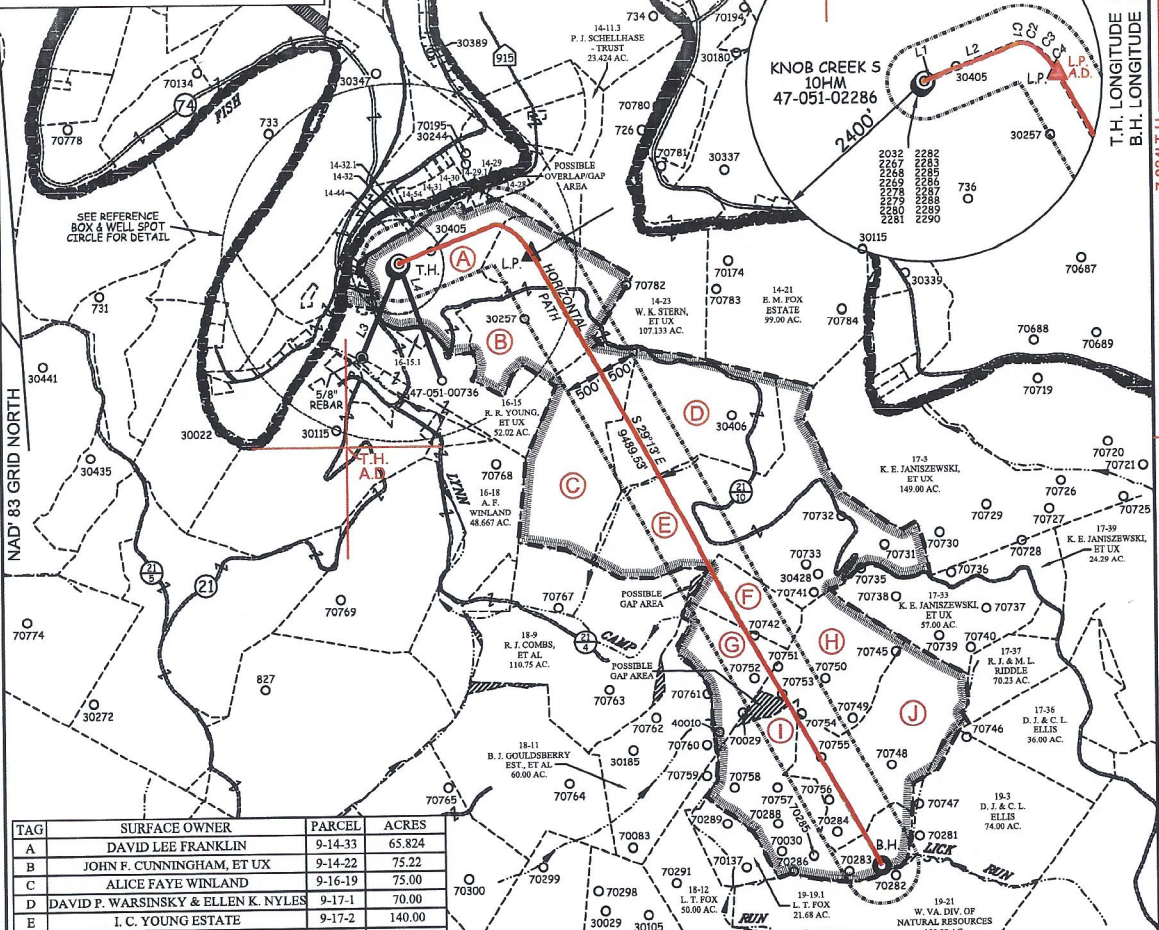
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH TVD: 6,382' / TMD: 16,440'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT JOSEPH C. MALLOW
ADDRESS 400 WOODCLIFF DRIVE ADDRESS 427 MIDSTATE DRIVE
CANONSBURG, PA 15317 CLARKSBURG, WV 26301

02/07/2025

COUNTY NAME
PERMIT

**KNOB CREEK S LEASE
WELL 10HM
EQT PRODUCTION CO.**



TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	JOHN F. CUNNINGHAM, ET UX	9-14-22	75.22
C	ALICE FAYE WINLAND	9-16-19	75.00
D	DAVID P. WARSINSKY & ELLEN K. NYLES	9-17-1	70.00
E	I. C. YOUNG ESTATE	9-17-2	140.00
F	WSD PROPERTIES, LLC	9-17-41	25.57
G	BETTY J. GOULDSBERRY EST., ET AL	9-18-10	20.00
H	I. C. YOUNG ESTATE	9-17-40	51.44
I	I. C. YOUNG ESTATE	9-19-1	80.00
J	I. C. YOUNG ESTATE	9-19-2	80.00

**AS DRILLED COORDINATES
FOR WELL NO. 10HM**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT)	N. 464,904.41	E. 1,629,692.01
NAD'83 GEO.	LAT-(N) 39.770160	LONG-(W) 80.705397
NAD'83 UTM (M)	N. 4,402,289.21	E. 525,231.36

LANDING POINT

NAD'83 S.P.C.(FT)	N. 464,991.7	E. 1,631,494.7
NAD'83 GEO.	LAT-(N) 39.770468	LONG-(W) 80.698998
NAD'83 UTM (M)	N. 4,402,325.0	E. 525,760.1

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 456,739.0	E. 1,636,120.1
NAD'83 GEO.	LAT-(N) 39.747979	LONG-(W) 80.682148
NAD'83 UTM (M)	N. 4,399,834.3	E. 527,231.3

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 69°41' E	155.87'
L2	N 68°10' E	1181.25'
L3	S 22°06' W	1361.60'
L4	S 19°37' E	1691.35'

CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	102.68'	194.20'	N 84°44' E	101.49'
C2	124.23'	380.34'	S 70°23' E	123.68'
C3	242.95'	702.85'	S 50°48' E	241.75'
C4	245.30'	1184.19'	S 35°12' E	244.86'

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SLS
FROM THE GROUND UP

12 Vanhook Drive P.O. Box 1501 Glenville, WV 26331 | 304.452.9434
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Brockley Bypass | Beckley, WV 25801 | 304.256.5295
slsvv.com

LEGEND

AS DRILLED

PROPOSED

GREGORY A. SMITH
LICENSED
No. 677
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

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

P.S. 677

LEGEND

LEASE LINE

SURFACE LINE

WELL LATERAL

OFFSET LINE

TIE LINE

CREEK

ROAD

COUNTY ROUTE

PROPOSED WELL

EXISTING WELL

PERMITTED WELL

TAX MAP-PARCEL

SURFACE OWNER (SEE TABLE)

LEASE # (SEE WW-6A1)

SCALE 1" = 2000' FILE NO. 8789P10HM ASDRILLED.dwg
KNOB CREEK S-10HM-REV3

DATE JULY 27, 2018
REVISED OCTOBER 30, 2023

OPERATORS WELL NO. KNOB CREEK S-10HM
API WELL 47-051-02286
NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DIVISION OF
ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL OPERATOR EQT PRODUCTION COMPANY
ADDRESS 400 WOODCLIFF DRIVE
CANONSBURG, PA 15317

DESIGNATED AGENT JOSEPH C. MALLOW
ADDRESS 427 MIDSTATE DRIVE
CLARKSBURG, WV 26301

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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	05/03/2024	16292	16141	48	Marcellus
3	05/07/2024	16112	15961	48	Marcellus
4	05/08/2024	15932	15781	48	Marcellus
5	05/09/2024	15752	15601	48	Marcellus
6	05/09/2024	15572	15421	48	Marcellus
7	05/10/2024	15392	15241	48	Marcellus
8	05/10/2024	15212	15061	48	Marcellus
9	05/10/2024	15032	14881	48	Marcellus
10	05/11/2024	14852	14701	48	Marcellus
11	05/11/2024	14672	14521	48	Marcellus
12	05/12/2024	14492	14341	48	Marcellus
13	05/14/2024	14312	14161	48	Marcellus
14	05/14/2024	14132	13981	48	Marcellus
15	05/15/2024	13952	13801	48	Marcellus
16	05/16/2024	13772	13621	48	Marcellus
17	05/16/2024	13592	13441	48	Marcellus
18	05/17/2024	13412	13261	48	Marcellus
19	05/18/2024	13232	13081	48	Marcellus
20	05/19/2024	13052	12901	48	Marcellus
21	05/19/2024	12872	12721	48	Marcellus
22	05/20/2024	12692	12541	48	Marcellus
23	05/21/2024	12512	12361	48	Marcellus
24	05/22/2024	12332	12181	48	Marcellus
25	05/22/2024	12152	12001	48	Marcellus
26	05/23/2024	11972	11821	48	Marcellus
27	05/24/2024	11792	11641	48	Marcellus
28	05/24/2024	11612	11461	48	Marcellus
29	05/25/2024	11432	11281	48	Marcellus
30	05/25/2024	11252	11101	48	Marcellus
31	05/26/2024	11072	10921	48	Marcellus
32	05/26/2024	10892	10741	48	Marcellus
33	05/26/2024	10712	10561	48	Marcellus
34	05/27/2024	10532	10381	48	Marcellus
35	05/27/2024	10352	10201	48	Marcellus
36	05/27/2024	10172	10021	48	Marcellus
37	05/28/2024	9992	9841	48	Marcellus
38	05/28/2024	9812	9661	48	Marcellus
39	05/28/2024	9632	9481	48	Marcellus
40	05/29/2024	9452	9301	48	Marcellus
41	05/29/2024	9272	9121	24	Marcellus
42	05/29/2024	9092	8941	24	Marcellus

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43	05/29/2024	8912	8761	48	Marcellus
44	05/30/2024	8732	8581	48	Marcellus
45	05/30/2024	8552	8401	48	Marcellus
46	05/30/2024	8372	8221	48	Marcellus
47	05/31/2024	8192	8041	48	Marcellus
48	05/31/2024	8012	7861	48	Marcellus
49	05/31/2024	7832	7681	48	Marcellus
50	05/31/2024	7652	7501	48	Marcellus
51	06/01/2024	7472	7321	48	Marcellus
52	06/01/2024	7292	7141	48	Marcellus
53	06/01/2024	7112	7021	32	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	05/05/2024	82	8768	0	3956	246291	7530.45	
2	05/07/2024	99	8159	7946	5059	451677	9284.81	
3	05/08/2024	98	8399	8058	5566	450433	9261.69	
4	05/09/2024	99	8565	8133	4920	450030	9116.74	
5	05/09/2024	100	8120	8360	4991	453485	9099.26	
6	05/10/2024	100	8524	8020	5058	450100	8969.21	
7	05/10/2024	100	8246	7649	5157	450080	9048.24	
8	05/10/2024	95	7944	8070	5200	451592	9170.45	
9	05/11/2024	100	8274	8059	5224	450084	8987.24	
10	05/11/2024	100	8088	0	5401	450457	9142.48	
11	05/12/2024	100	8188	0	5550	449555	9059.86	
12	05/13/2024	100	8025	0	5513	451078	9169.00	
13	05/14/2024	100	8020	9043	5335	450268	8948.21	
14	05/15/2024	99	7990	0	5555	453360	9015.81	
15	05/16/2024	100	8205	0	5358	450340	9000.98	
16	05/17/2024	100	8008	0	5326	449680	9009.88	
17	05/18/2024	100	7962	0	5250	449900	9048.64	
18	05/18/2024	100	7840	8675	5086	450030	9041.62	
19	05/19/2024	100	7951	0	5300	449360	9007.76	
20	05/19/2024	100	8109	8900	5546	555194	8974.79	
21	05/20/2024	100	7803	8750	5350	450347	8952.67	
22	05/21/2024	100	7948	8910	5365	449561	8921.43	
23	05/22/2024	100	7809	8554	5317	451280	9009.19	
24	05/22/2024	100	7643	8158	5294	450343	8881.17	
25	05/23/2024	100	7665	7800	5355	450460	8957.60	
26	05/24/2024	100	7629	8552	5252	451900	8953.71	
27	05/24/2024	100	7749	8491	5043	450382	8927.00	
28	05/25/2024	100	7600	8265	5321	451060	8932.81	
29	05/25/2024	100	7851	8717	5014	451300	8796.29	
30	05/26/2024	100	7723	8817	5471	450830	8937.95	
31	05/26/2024	100	7759	8662	5310	450238	8843.07	
32	05/27/2024	100	7798	8895	5180	449052	8867.69	
33	05/27/2024	100	7673	8476	5162	450815	8882.50	
34	05/27/2024	99	8315	9136	4561	450176	8790.55	
35	05/28/2024	100	7675	8664	5058	450520	8875.17	
36	05/28/2024	96	7679	8806	4721	451350	8880.38	
37	05/28/2024	100	7353	0	5188	451200	8871.57	
38	05/28/2024	99	7504	8777	4464	449240	8936.29	
39	05/29/2024	100	7589	8850	5103	451605	8911.43	
40	05/29/2024	99	8248	0	4142	449480	8860.90	
41	05/29/2024	97	7900	0	4123	450320	8897.81	

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42	05/29/2024	74	7499	8630	3561	450160	8590.86
43	05/30/2024	99	7995	0	5152	450120	8828.33
44	05/30/2024	100	7519	0	7855	440140	8782.14
45	05/31/2024	96	7843	0	4380	451820	8685.86
46	05/31/2024	99	7750	0	4891	436160	8580.62
47	05/31/2024	98	7929	0	4796	451040	8822.17
48	05/31/2024	99	7525	0	4890	452200	8945.26
49	06/01/2024	99	7161	8321	5200	432958	8852.29
50	06/01/2024	82	7502	8317	4100	434820	8648.52
51	06/01/2024	100	7334	0	4985	451580	8803.19
52	06/01/2024	100	7010	0	4932	452090	8767.10
53	06/02/2024	100	7227	8491	5353	300240	5872.33

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	05/05/2024
Job End Date:	06/01/2024
State:	West Virginia
County:	Marshall
API Number:	47-051-02286-00-00
Operator Name:	EQT Production
Well Name and Number:	Knob Creek S-10HM
Latitude:	39.770162
Longitude:	-80.705399
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6476
Total Base Water Volume (gal)*:	19696024.74
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	87.32554	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	12.52678	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.01553	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.01553	None
Clearal 268	ChemStream	Biocide					
			Water	7732-18-5	80.00000	0.00879	None

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StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Water	7732-18-5	15.00000	0.00218	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00111	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00055	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00028	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00024	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00002	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
Clearal 268	ChemStream	Biocide					
			Ethanol	64-17-5	1.50000	0.00000	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/Maleic Anhydride Co- polymer	9003-04-7	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)

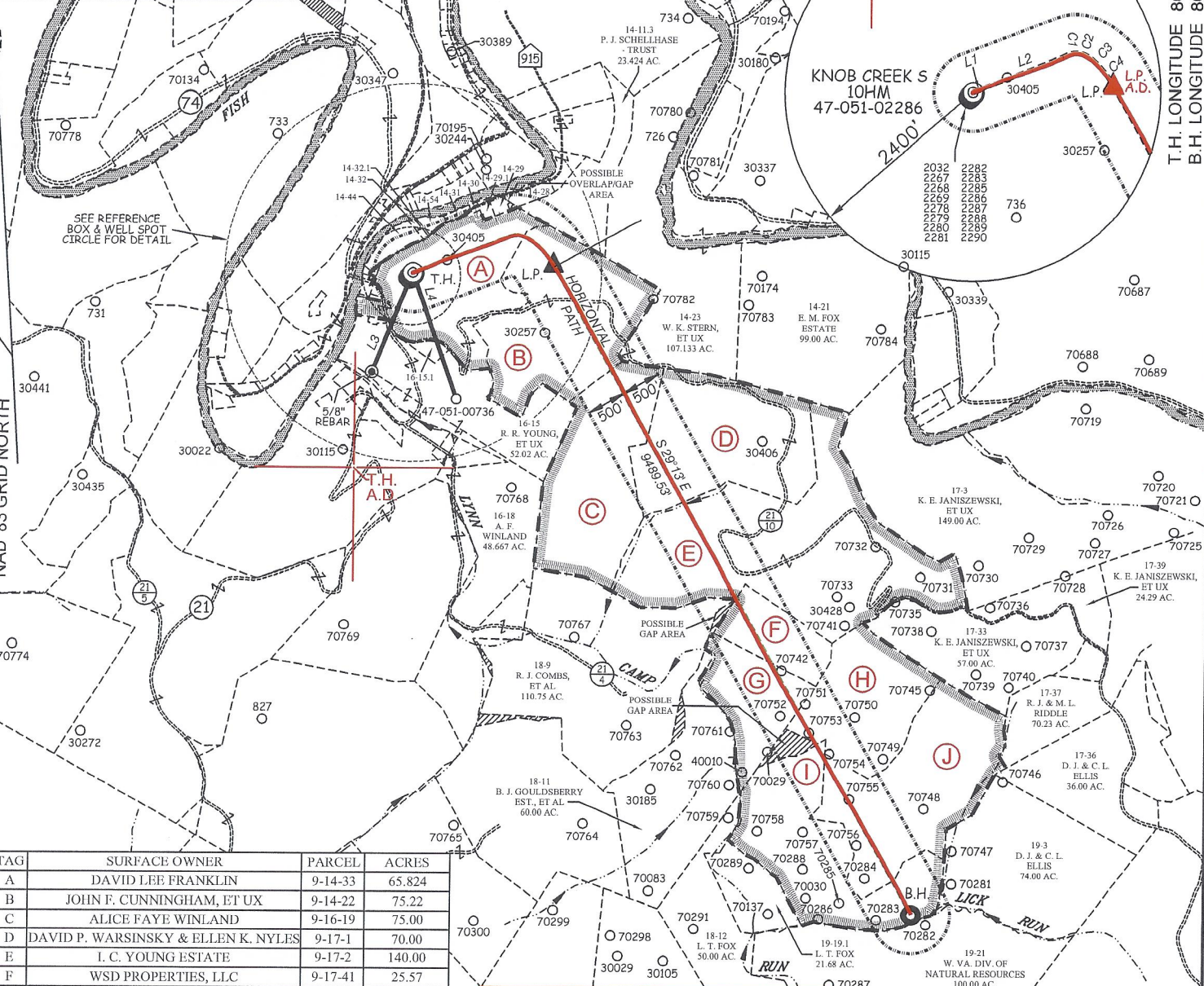
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**KNOB CREEK S LEASE
WELL 10HM
EQT PRODUCTION CO.**



TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	JOHN F. CUNNINGHAM, ET UX	9-14-22	75.22
C	ALICE FAYE WINLAND	9-16-19	75.00
D	DAVID P. WARSINSKY & ELLEN K. NYLES	9-17-1	70.00
E	I. C. YOUNG ESTATE	9-17-2	140.00
F	WSD PROPERTIES, LLC	9-17-41	25.57
G	BETTY J. GOULDSBERRY EST., ET AL	9-18-10	20.00
H	I. C. YOUNG ESTATE	9-17-40	51.44
I	I. C. YOUNG ESTATE	9-19-1	80.00
J	I. C. YOUNG ESTATE	9-19-2	80.00

**AS DRILLED COORDINATES
FOR WELL NO. 10HM**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 464,904.41 E. 1,629,692.01
 NAD'83 GEO. LAT-(N) 39.770160 LONG-(W) 80.705397
 NAD'83 UTM (M) N. 4,402,289.21 E. 525,231.36

LANDING POINT
 NAD'83 S.P.C.(FT) N. 464,991.7 E. 1,631,494.7
 NAD'83 GEO. LAT-(N) 39.770466 LONG-(W) 80.698988
 NAD'83 UTM (M) N. 4,402,325.0 E. 525,780.1

BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 456,739.0 E. 1,636,120.1
 NAD'83 GEO. LAT-(N) 39.747979 LONG-(W) 80.682148
 NAD'83 UTM (M) N. 4,399,834.3 E. 527,231.3

LINE	BEARING	DISTANCE
L1	N 69°41' E	155.87'
L2	N 68°10' E	1181.25'
L3	S 22°06' W	1361.60'
L4	S 19°37' E	1691.35'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	102.68'	194.20'	N 84°44' E	101.49'
C2	124.23'	380.34'	S 70°23' E	123.68'
C3	242.95'	702.85'	S 50°48' E	241.75'
C4	245.30'	1184.19'	S 35°12' E	244.86'

12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
 slsvw.com

LEGEND

AS DRILLED

PROPOSED

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 464,904.41 E. 1,629,692.01
 NAD'83 GEO. LAT-(N) 39.770160 LONG-(W) 80.705397
 NAD'83 UTM (M) N. 4,402,289.21 E. 525,231.36

LANDING POINT
 NAD'83 S.P.C.(FT) N. 465,012.8 E. 1,631,480.7
 NAD'83 GEO. LAT-(N) 39.770523 LONG-(W) 80.699039
 NAD'83 UTM (M) N. 4,402,331.3 E. 525,775.7

BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 456,730.5 E. 1,636,112.6
 NAD'83 GEO. LAT-(N) 39.747956 LONG-(W) 80.682174
 NAD'83 UTM (M) N. 4,399,831.7 E. 527,229.0

GREGORY A. SMITH
 LICENSED
 No. 677
 STATE OF
 WEST VIRGINIA
 PROFESSIONAL SURVEYOR

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

P.S. 677

LEGEND

LEASE LINE

SURFACE LINE

WELL LATERAL

OFFSET LINE

TIE LINE

CREEK

ROAD

COUNTY ROUTE

PROPOSED WELL

EXISTING WELL

PERMITTED WELL

TAX MAP-PARCEL

SURFACE OWNER (SEE TABLE)

LEASE # (SEE WW-6A1)

SCALE 1" = 2000' FILE NO. 8789P10HM ASDRILLED.dwg
 DATE JULY 27, 20 18
 REVISED OCTOBER 30, 2023
 OPERATORS WELL NO. KNOB CREEK S-10HM
 API WELL NO. 47-051-02286
 NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF
 ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT JOSEPH C. MALLOW
 ADDRESS 400 WOODCLIFF DRIVE ADDRESS 427 MIDSTATE DRIVE
CANONSBURG, PA 15317 CLARKSBURG, WV 26301

COUNTY NAME _____
 PERMIT _____

02/07/2025