

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

API 47 - 051 - 02032 County Marshall District Meade WV Department of Environmental Protection  
Quad Glen Easton 7.5' Pad Name KNOB CREEK Field/Pool Name N/A  
Farm name David Lee Franklin Well Number Knob Creek N-5HM (L027471)  
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 4,402,265.21 Easting 525,220.39  
Landing Point of Curve Northing 4,402,439.4 Easting 525,742.1  
Bottom Hole Northing 4,403,806.7 Easting 524,832.7  
432.7

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 14.55 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 09/05/2018 Date drilling commenced 08/09/2020 Date drilling ceased 11/27/2023  
Date completion activities began 07/02/2024 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

APPROVED

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

Reviewed by:  
SR  
02/07/2025  
STRADLER  
12/23/2024

WR-35  
Rev. 8/23/13

API 47-051 - 02032

Farm name David Lee Franklin

Well number Knob Creek N-5HM (L027471)

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"	504'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2284'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	5-1/2"	12,307'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1294' 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	329	15.6	1.21	398	0	8+
Surface	CLASS A	701	15.6	1.18	827	0	8
Coal							
Intermediate 1	CLASS A	790	15.6	1.18	932	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2190	15.0	1.18	2584	1294'	8+
Tubing							

Drillers TD (ft) 12,345'

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) 1268'

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 51'

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



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PRODUCING FORMATION(S)	DEPTHS	
	TVD	MD

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Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
SHUT-IN PRESSURE Surface \_\_\_\_\_ psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs  
OPEN FLOW Gas \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  
 Estimated  Orifice  Pilot

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

Please insert additional pages as applicable.

Drilling Contractor Patterson UTI (294)  
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Baker Hughes  
Address 400 Technology Dr Suite 100 City Canonsburg State PA Zip 15317

Cementing Company Halliburton  
Address 121 Champion Way Suite 110 City Canonsburg State PA Zip 15317

Cementing Company American Cementing  
Address 603 US Highway 19 N City Weston State WV Zip 26452

Please insert additional pages as applicable.

Completed by Jacob Caplan Telephone 412-215-2723  
Signature [Signature] Title Mgr Completions Engr Date 2024-11-07

WR-35  
Rev. 8/23/13

API 47- 051 - 02032 Farm name David Lee Franklin Well number Knob Creek N-5HM (L027471)

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 N-5HM (L027471) Final Formations API# 47-051-02032				
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	2,354
Sand/Shale	2,357	2,354	2,359	2,356
Gordon	2,359	2,356	2,437	2,433
50F	2,437	2,433	2,508	2,504
Sand/Shale	2,508	2,504	3,008	3,002
Speechley	3,008	3,002	4,852	4,645
Alexander	4,852	4,645	5,302	4,998
Elks	5,302	4,998	6,328	5,814
Sonyea	6,328	5,814	6,432	5,898
Middlesex	6,432	5,898	6,469	5,927
Genesee	6,469	5,927	6,533	5,974
Geneseo	6,533	5,974	6,585	6,010
Tully	6,585	6,010	6,638	6,045
Hamilton	6,638	6,045	6,843	6,152
Marcellus	6,843	6,152	12,345	6,228

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# KNOB CREEK N LEASE WELL 5HM EQT PRODUCTION CO.

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

### NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. FIVE (5) DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD. WAIVER TO BE OBTAINED.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'
- WELL PLAT UPDATED TO SHOW AS-DRILLED PATH.
- AS-DRILLED INFORMATION PROVIDED BY EQT PRODUCTION CO.

### AS DRILLED COORDINATES FOR WELL NO. 5HM

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17)  
 NAD83 S.P.C.(FT) N. 464,826.26 E. 1,629,654.71  
 NAD83 GEO. LAT-(N) 39.769944 LONG-(W) 80.705526  
 NAD83 UTM (M) N. 4,402,265.21 E. 525,220.39

**LANDING POINT**  
 NAD83 S.P.C.(FT) N. 465,369.2 E. 1,631,376.3  
 NAD83 GEO. LAT-(N) 39.771498 LONG-(W) 80.699428  
 NAD83 UTM (M) N. 4,402,439.4 E. 525,742.1

**BOTTOM HOLE**  
 NAD83 S.P.C.(FT) N. 469,900.3 E. 1,628,795.2  
 NAD83 GEO. LAT-(N) 39.783841 LONG-(W) 80.708826  
 NAD83 UTM (M) N. 4,403,806.7 E. 524,932.7

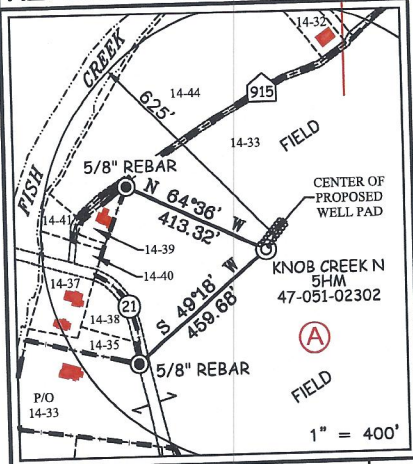
### (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD83 S.P.C.(FT) N. 464,826.26 E. 1,629,654.71  
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 NAD83 UTM (M) N. 4,402,265.21 E. 525,220.39

**LANDING POINT**  
 NAD83 S.P.C.(FT) N. 465,400.1 E. 1,631,348.3  
 NAD83 GEO. LAT-(N) 39.771581 LONG-(W) 80.699528  
 NAD83 UTM (M) N. 4,402,448.7 E. 525,793.4

**BOTTOM HOLE**  
 NAD83 S.P.C.(FT) N. 470,104.0 E. 1,628,682.5  
 NAD83 GEO. LAT-(N) 39.784396 LONG-(W) 80.709237  
 NAD83 UTM (M) N. 4,403,868.2 E. 524,897.3

### REFERENCES



TAX MAP/PCL	ADJOINING SURFACE OWNER	ACREAGE
13-11.1	SAMUEL & HEATHER SUHODOLSKI	0.49
13-14	MARGARET K. FOX - LIFE (C/O PAUL FOX)	3.00
14-1.1	MICHAEL L. ALVAREZ	1.6
14-3	MICHAEL L. ALVAREZ	NORTH P/O 3 PCLS
14-4	MICHAEL L. ALVAREZ	3 PCLS & 1/8 AC
14-5	MICHAEL L. ALVAREZ	200 X 60 PCL
14-6	MICHAEL L. ALVAREZ	120' X 200 PCL
14-7	JOHN T. ERAZMUS, III	0.25
14-8	JOHNNY C. & JOHNNY C. II HOLCOMB	0.80
14-9	JOHN E. DUFFY, ET UX	0.80
14-10	ROBERT I. DUFFY - LIFE (C/O CAROLYN L. DUFFY)	0.25
14-11.1	PATRICK J. SCHELLHASE - TRUST	7.617
14-11.2	LOVE A. BLAKE	4.00
14-26	PATRICK J. SCHELLHASE - TRUST	12.588
14-27	PATRICK J. SCHELLHASE - TRUST	3.004
14-28	CHARLES R. SCHELLHASE, ET UX	3.029
14-29	ANDREW FASOULETOS, ET UX (C/O TENA MARIE STRICKLIN)	0.209
14-29.1	ANDREW FASOULETOS, ET UX (C/O TENA MARIE STRICKLIN)	1.171
14-32	TWILA C. COFFIELD	0.583
14-32.1	TWILA C. COFFIELD	0.184
14-35	PAUL G. FOX	0.338
14-36	MARGARET K. FOX - LIFE (C/O PAUL FOX)	1600 SQ. FT
14-37	MARGARET K. FOX - LIFE (C/O PAUL FOX)	LOT
14-38	MARGARET K. FOX - LIFE (C/O PAUL FOX)	0.631
14-39	MARGARET K. FOX - LIFE (C/O PAUL FOX)	8675 SQ. ST.
14-40	MARGARET K. FOX - LIFE (C/O PAUL FOX)	19,560 SQ. FT.
14-41	MARGARET K. FOX - LIFE (C/O PAUL FOX)	9165 SQ. FT.
14-44	DAVID LEE FRANKLIN	2.913
14-44.1	GEORGE R. TAYLOR, ET UX	4.423
14-47	MICHAEL L. & CHERYL J. ACREE	0.355
14-48	MICHAEL L. & CHERYL J. ACREE	0.473
14-49	MICHAEL L. & CHERYL J. ACREE	0.118
14-50	RONALD MARSH	0.707
14-51	GEORGE R. TAYLOR, ET UX	1.621
14-52	JAMES E. PEELMAN	0.439
14-53	JAMES E. PEELMAN	0.555
14-54	RICHARD L. HARVETH, ET UX (C/O RICHARD L. HARVETH)	1.649
16-14	LYNN CAMP METHODIST CHURCH #1 and Gas	0.762
16-15.1	ERIC J. YOUNG	1.98

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°42'30"  
7,913' T.H.A.D.

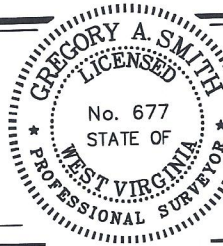


12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26331 | 304.452.5634  
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5299  
 sls.com

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 NOVEMBER 29, 2023

REVISED \_\_\_\_\_

OPERATORS WELL NO. KNOB CREEK N-5HM

API WELL NO. 47 - 051 - 02032  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8789EQTP5HMAD.dwg  
 KNOB CREEK N-5HM-REV5  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)  
 SCALE 1" = 1000'

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 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: 6,378' / TMD: 12,588'

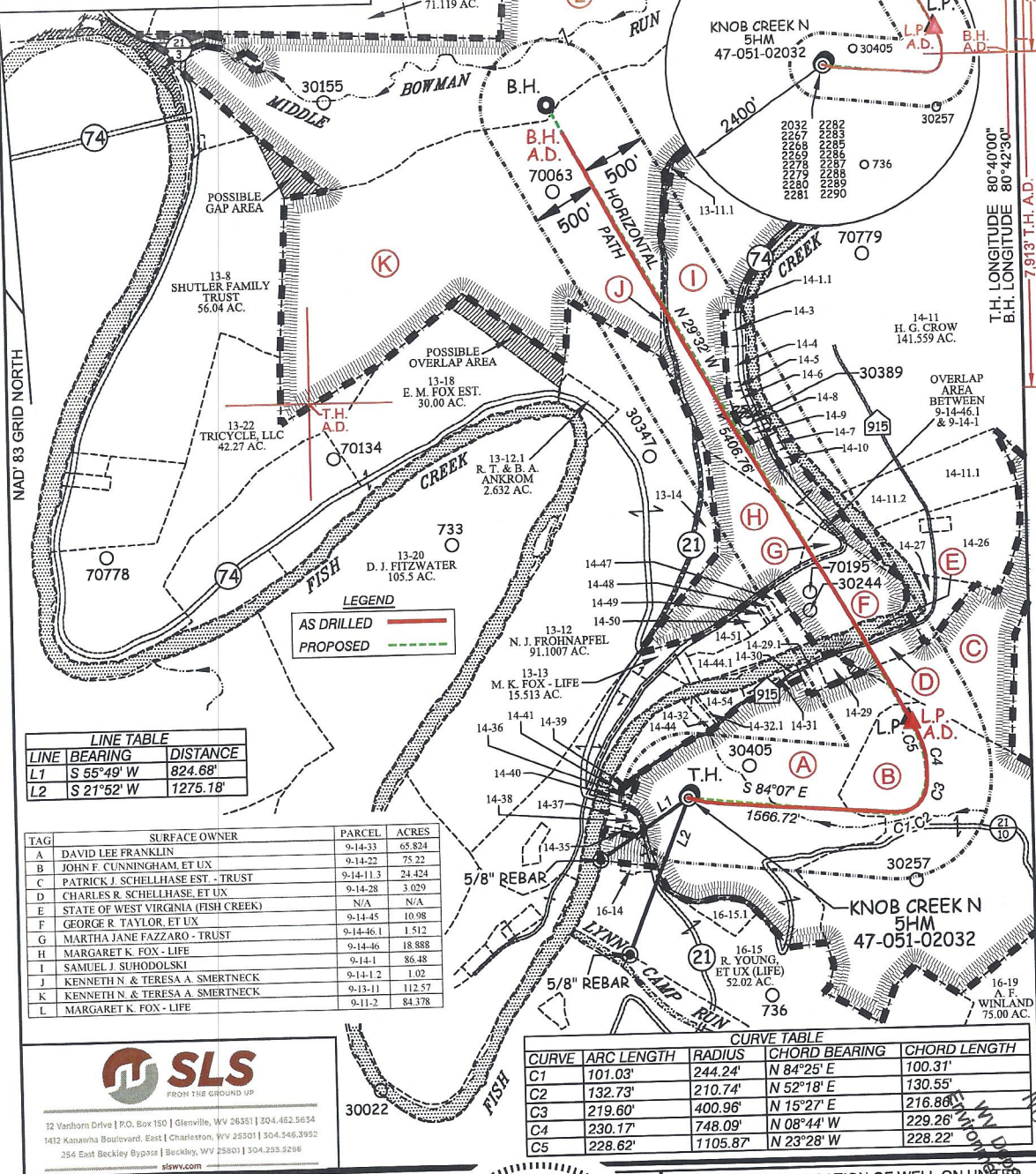
WELL OPERATOR EQT PRODUCTION COMPANY  
 ADDRESS 400 WOODCLIFF DRIVE  
 CANONSBURG, PA 15317

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

02/07/2025

COUNTY NAME PERMIT

**NOB CREEK N LEASE  
WELL 5HM  
EQT PRODUCTION CO.**



**LINE TABLE**

LINE	BEARING	DISTANCE
L1	S 55°49' W	824.68'
L2	S 21°52' W	1275.18'

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	PATRICK J. SCHELLHASE EST. - TRUST	9-14-11.3	24.424
D	CHARLES R. SCHELLHASE, ET UX	9-14-28	3.029
E	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
F	GEORGE R. TAYLOR, ET UX	9-14-45	10.98
G	MARTHA JANE FAZZARO - TRUST	9-14-46.1	1.512
H	MARGARET K. FOX - LIFE	9-14-46	18.888
I	SAMUEL J. SUHODOLSKI	9-14-1	86.48
J	KENNETH N. & TERESA A. SMERTNECK	9-14-1.2	1.02
K	KENNETH N. & TERESA A. SMERTNECK	9-13-11	112.57
L	MARGARET K. FOX - LIFE	9-11-2	84.378

**SLS**  
FROM THE GROUND UP

32 Vanhorn Drive | P.O. Box 150 | Glenview, WV 26031 | 304.482.5654  
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.546.2952  
 254 East Beckley Bypass | Beckley, WV 25801 | 304.293.5296

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**CURVE TABLE**

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	101.03'	244.24'	N 84°25' E	100.31'
C2	132.73'	210.74'	N 52°18' E	130.55'
C3	219.60'	400.96'	N 15°27' E	216.88'
C4	230.17'	748.09'	N 08°44' W	229.26'
C5	228.62'	1105.87'	N 23°28' W	228.22'

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

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

P.S. 677 *Gregory A. Smith*

SCALE 1" = 1000' FILE NO. 8789EQT5HMAD.dwg  
 KNOB CREEK N-5HM-REV5  
 DATE NOVEMBER 29, 2023  
 OPERATORS WELL NO. KNOB CREEK N-5HM  
 API WELL 47-051-02032  
 NO. STATE COUNTY PERMIT

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

**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)

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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# Perforation Data

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Environmental Protection

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Stage No.	Perforation Date	Stage Perforated From TMD Ft.	Stage Perforated To TMD Ft.	# of Perforations/Stage	Formation(s)
2	07/02/2024	12210	12061	48	Marcellus
3	07/02/2024	12033	11884	48	Marcellus
4	07/03/2024	11856	11707	48	Marcellus
5	07/03/2024	11679	11529	48	Marcellus
6	07/04/2024	11502	11352	48	Marcellus
7	07/04/2024	11324	11175	48	Marcellus
8	07/04/2024	11147	10998	48	Marcellus
9	07/05/2024	10970	10821	48	Marcellus
10	07/05/2024	10793	10643	48	Marcellus
11	07/06/2024	10616	10466	48	Marcellus
12	07/06/2024	10438	10289	48	Marcellus
13	07/07/2024	10261	10112	48	Marcellus
14	07/07/2024	10084	9935	48	Marcellus
15	07/10/2024	9907	9757	48	Marcellus
16	07/10/2024	9730	9580	48	Marcellus
17	07/11/2024	9552	9403	48	Marcellus
18	07/11/2024	9375	9226	48	Marcellus
19	07/12/2024	9198	9049	48	Marcellus
20	07/12/2024	9021	8871	48	Marcellus
21	07/14/2024	8844	8694	48	Marcellus
22	07/14/2024	8666	8517	48	Marcellus
23	07/14/2024	8489	8340	48	Marcellus
24	07/15/2024	8312	8163	48	Marcellus
25	07/15/2024	8135	7985	48	Marcellus
26	07/15/2024	7958	7808	48	Marcellus
27	07/15/2024	7780	7631	48	Marcellus
28	07/16/2024	7603	7454	48	Marcellus
29	07/16/2024	7426	7277	48	Marcellus
30	07/16/2024	7247	7125	40	Marcellus

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# Stimulation Data

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NOV 12 2024  
WV Department of  
Environmental Protection  
02/07/2025

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	07/02/2024	82	7692	0	4220	250160	12542.45	
2	07/03/2024	100	7898	8447	4744	453480	8977.67	
3	07/03/2024	100	7735	8534	4932	450356	8847.12	
4	07/03/2024	100	8049	8957	4940	451737	8799.17	
5	07/04/2024	100	7452	8241	5058	450135	8794.95	
6	07/04/2024	83	8504	8808	4610	452451	8778.69	
7	07/04/2024	97	7955	8819	6369	435443	8720.17	
8	07/05/2024	100	7338	8866	5240	451001	8702.33	
9	07/05/2024	100	7543	8887	5112	450304	8746.98	
10	07/06/2024	92	8117	8908	5127	431749	8897.02	
11	07/06/2024	91	8544	8897	4961	450072	8997.48	
12	07/07/2024	93	8232	8577	4563	449648	8775.50	
13	07/07/2024	98	7889	8747	5030	452676	8785.79	
14	07/10/2024	28	8580	8995	6306	144131	7720.10	
15	07/11/2024	99	7816	9004	4976	450962	8727.14	
16	07/11/2024	96	8056	0	5095	455991	8776.62	
17	07/11/2024	101	7319	0	5433	438000	8755.60	
18	07/12/2024	67	8443	0	4833	450458	8725.86	
19	07/13/2024	99	7943	8709	5050	450173	8701.81	
20	07/14/2024	101	7439	7731	5201	450114	9849.67	
21	07/14/2024	92	7156	0	4806	420107	8541.33	
22	07/14/2024	92	6782	0	5108	450415	8787.07	
23	07/15/2024	89	6464	0	5032	450294	8744.52	
24	07/15/2024	89	7363	0	5287	455779	8617.69	
25	07/15/2024	88	7214	0	5108	453120	8626.93	
26	07/16/2024	90	6980	8408	5001	450917	8797.90	
27	07/16/2024	90	7051	0	5143	452949	8676.71	
28	07/16/2024	89	7030	0	5325	897368	8597.38	
29	07/16/2024	89	6723	0	5515	450200	8615.62	
30	07/17/2024	83	7881	8695	4941	375233	7438.05	

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# Hydraulic Fracturing Fluid Product Component Information Disclosure



Water Source	Percent
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Job Start Date:	07/02/2024
Job End Date:	07/16/2024
State:	West Virginia
County:	Marshall
API Number:	47-051-02032-00-00
Operator Name:	EQT Production
Well Name and Number:	Knob Creek N-5HM
Latitude:	39.769946
Longitude:	-80.705528
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6256
Total Base Water Volume (gal)*:	11132743.44
Total Base Non Water Volume:	0

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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	87.28693	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	12.51992	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.01962	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.01962	None
Clearal 268	ChemStream	Biocide					
			Water	7732-18-5	80.00000	0.00853	None

02/07/2025

StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Water	7732-18-5	15.00000	0.00276	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00193	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00053	None
HCR-7000 WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00048	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00031	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00002	None
Clearal 268	ChemStream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	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 N Lease Well 5HM EQT Production Co.

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

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

NAD'83 S.P.C.(FT)	N. 464,826.26	E. 1,629,654.71
NAD'83 GEO.	LAT-(N) 39.769944	LONG-(W) 80.705526
NAD'83 UTM (M)	N. 4,402,265.21	E. 525,220.39

**LANDING POINT**

NAD'83 S.P.C.(FT)	N. 465,400.1	E. 1,631,348.3
NAD'83 GEO.	LAT-(N) 39.771581	LONG-(W) 80.699528
NAD'83 UTM (M)	N. 4,402,448.7	E. 525,733.4

**BOTTOM HOLE**

NAD'83 S.P.C.(FT)	N. 470,104.0	E. 1,628,682.5
NAD'83 GEO.	LAT-(N) 39.784396	LONG-(W) 80.709237
NAD'83 UTM (M)	N. 4,403,868.2	E. 524,897.3

### NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. FIVE (5) DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD. WAIVER TO BE OBTAINED.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'
- WELL PLAT UPDATED TO SHOW AS-DRILLED PATH.
- AS-DRILLED INFORMATION PROVIDED BY EQT PRODUCTION CO.

### AS DRILLED COORDINATES FOR WELL NO. 5HM

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

NAD'83 S.P.C.(FT)	N. 464,826.26	E. 1,629,654.71
NAD'83 GEO.	LAT-(N) 39.769944	LONG-(W) 80.705526
NAD'83 UTM (M)	N. 4,402,265.21	E. 525,220.39

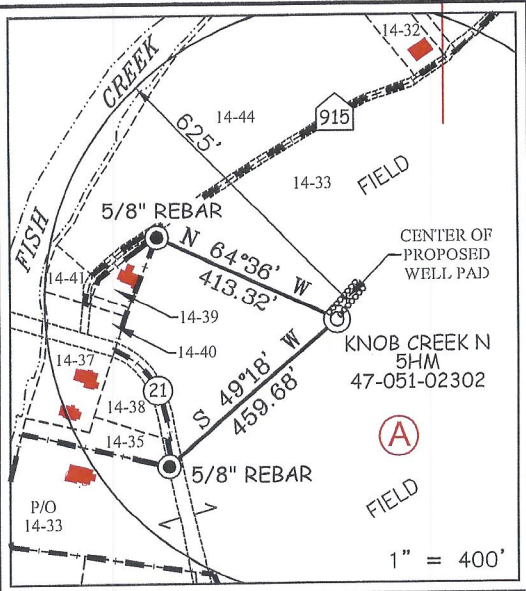
**LANDING POINT**

NAD'83 S.P.C.(FT)	N. 465,369.2	E. 1,631,376.3
NAD'83 GEO.	LAT-(N) 39.771498	LONG-(W) 80.699428
NAD'83 UTM (M)	N. 4,402,439.4	E. 525,742.1

**BOTTOM HOLE**

NAD'83 S.P.C.(FT)	N. 469,900.3	E. 1,628,795.2
NAD'83 GEO.	LAT-(N) 39.783841	LONG-(W) 80.708826
NAD'83 UTM (M)	N. 4,403,806.7	E. 524,932.7

### REFERENCES



TAX MAP/PCL	ADJOINING SURFACE OWNER	ACREAGE
13-11.1	SAMUEL & HEATHER SUHODOLSKI	0.49
13-14	MARGARET K. FOX - LIFE (C/O PAUL FOX)	3.00
14-1.1	MICHAEL L. ALVAREZ	1.6
14-3	MICHAEL L. ALVAREZ	NORTH P/O 3 PCLS
14-4	MICHAEL L. ALVAREZ	3 PCLS & 1/8 AC.
14-5	MICHAEL L. ALVAREZ	200' X 60' PCL
14-6	MICHAEL L. ALVAREZ	120' X 200' PCL
14-7	JOHN T. ERAZMUS, III	0.25
14-8	JOHNNY C. & JOHNNY C. II HOLCOMB	0.80
14-9	JOHN E. DUFFY, ET UX	0.80
14-10	ROBERT I. DUFFY - LIFE (C/O CAROLYN L. DUFFY)	0.25
14-11.1	PATRICK J. SCHELLHASE - TRUST	7.617
14-11.2	LOYE A. BLAKE	4.00
14-26	PATRICK J. SCHELLHASE - TRUST	12.588
14-27	PATRICK J. SCHELLHASE - TRUST	3.004
14-28	CHARLES R. SCHELLHASE, ET UX	3.029
14-29	ANDREW FASOULETOS, ET UX (C/O TENA MARIE STRICKLIN)	0.209
14-29.1	ANDREW FASOULETOS, ET UX (C/O TENA MARIE STRICKLIN)	1.171
14-32	TWILA C. COFFIELD	0.583
14-32.1	TWILA C. COFFIELD	0.184
14-35	PAUL G. FOX	0.338
14-36	MARGARET K. FOX - LIFE (C/O PAUL FOX)	1600 SQ. FT.
14-37	MARGARET K. FOX - LIFE (C/O PAUL FOX)	LOT
14-38	MARGARET K. FOX - LIFE (C/O PAUL FOX)	0.631
14-39	MARGARET K. FOX - LIFE (C/O PAUL FOX)	8675 SQ. ST.
14-40	MARGARET K. FOX - LIFE (C/O PAUL FOX)	19,560 SQ. FT.
14-41	MARGARET K. FOX - LIFE (C/O PAUL FOX)	9165 SQ. FT.
14-44	DAVID LEE FRANKLIN	2.913
14-44.1	GEORGE R. TAYLOR, ET UX	4.423
14-47	MICHAEL L. & CHERYL J. ACREE	0.355
14-48	MICHAEL L. & CHERYL J. ACREE	0.473
14-49	MICHAEL L. & CHERYL J. ACREE	0.118
14-50	RONALD MARSH	0.707
14-51	GEORGE R. TAYLOR, ET UX	1.621
14-52	JAMES E. PEELMAN	0.439
14-53	JAMES E. PEELMAN	0.555
14-54	RICHARD L. HARVETH, ET UX (C/O RICHARD LEE HARVETH)	1.649
16-14	LYNN CAMP METHODIST CHURCH	0.762
16-15.1	ERIC J. YOUNG	1.98

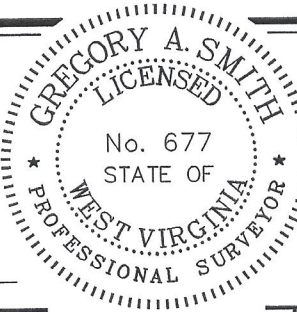
T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°42'30"  
7,913' T.H.A.D.



12 Vanhorn Drive | P.O. Box 150 | Glasville, WV 26391 | 304.462.5634  
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
 254 East Buckley Bypass | Buckley, WV 25801 | 304.298.5296  
 slswv.com

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 NOVEMBER 29, 2023

REVISED \_\_\_\_\_  
 OPERATORS WELL NO. Knob Creek N-5HM  
 API WELL NO. 47 - 051 - 02032  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789EQTP5HMAD.dwg  
Knob Creek N-5HM-REV5  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 1000'

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



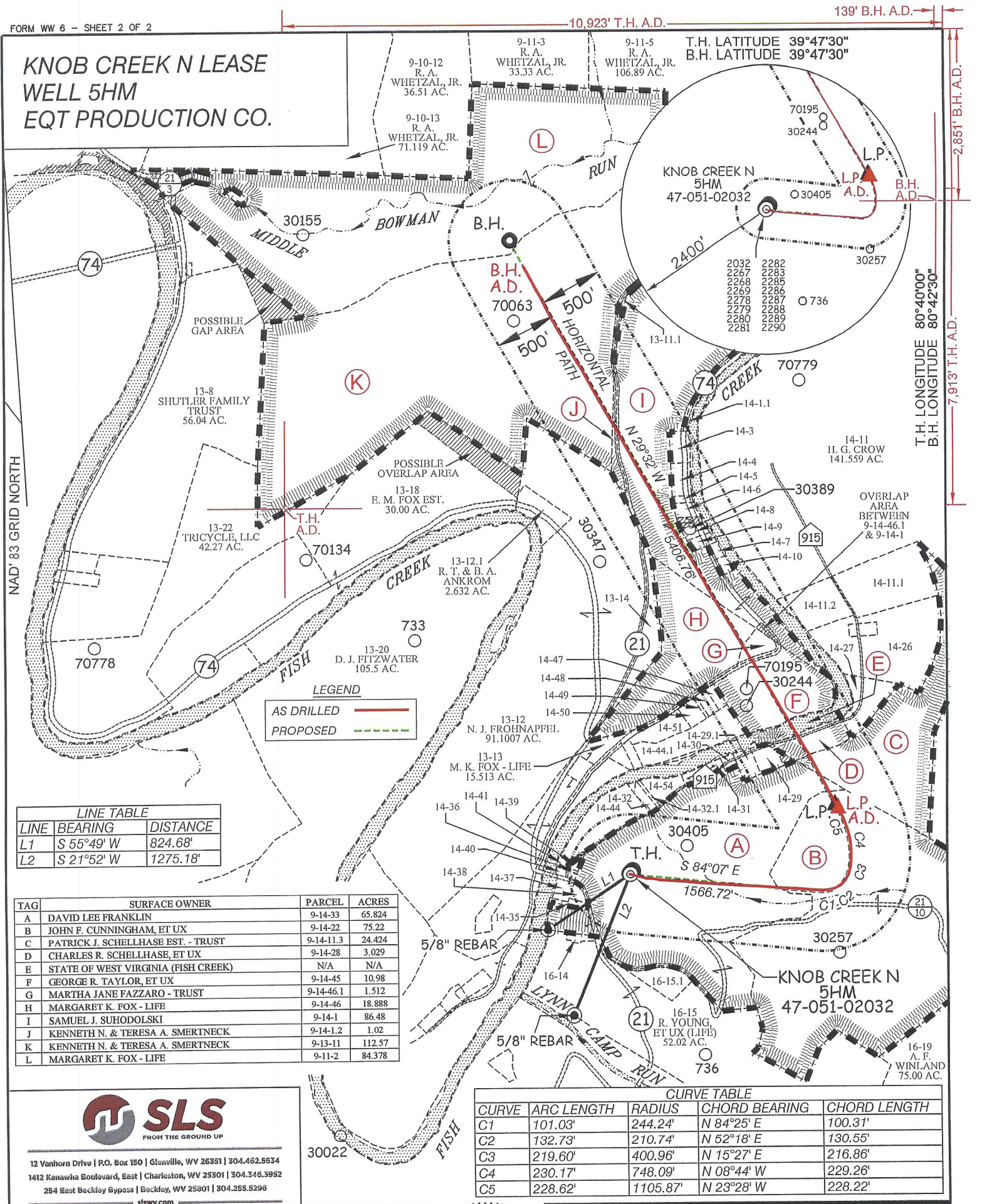
WELL TYPE: OIL \_\_\_\_\_ GAS X LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_ IF "GAS" PRODUCTION X STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW X

LOCATION:  
 ELEVATION 737.50' WATERSHED FISH CREEK (HUC 10)  
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE 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:  
 DRILL X CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE X 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: 6,378' / TMD: 12,588'

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

**KNOB CREEK N LEASE  
WELL 5HM  
EQT PRODUCTION CO.**



**LINE TABLE**

LINE	BEARING	DISTANCE
L1	S 55°49' W	824.68'
L2	S 21°52' W	1275.18'

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	PATRICK J. SCHELLHASE EST. - TRUST	9-14-11.3	24.424
D	CHARLES R. SCHELLHASE, ET UX	9-14-28	3.029
E	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
F	GEORGE R. TAYLOR, ET UX	9-14-45	10.98
G	MARTHA JANE FAZZARO - TRUST	9-14-46.1	1.512
H	MARGARET K. FOX - LIFE	9-14-46	18.888
I	SAMUEL J. SUHODOLSKI	9-14-1	86.48
J	KENNETH N. & TERESA A. SMERTNECK	9-14-1.2	1.02
K	KENNETH N. & TERESA A. SMERTNECK	9-13-11	112.57
L	MARGARET K. FOX - LIFE	9-11-2	84.378

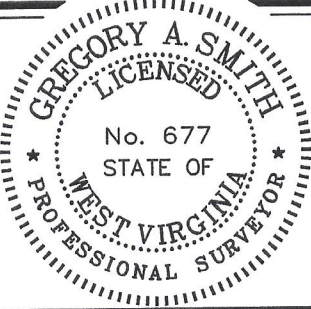
**CURVE TABLE**

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	101.03'	244.24'	N 84°25' E	100.31'
C2	132.73'	210.74'	N 52°18' E	130.55'
C3	219.60'	400.96'	N 15°27' E	216.86'
C4	230.17'	748.09'	N 08°44' W	229.26'
C5	228.62'	1105.87'	N 23°28' W	228.22'



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 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
 slaw.com

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

P.S. 677 *Gregory A. Smith*

**LEGEND**

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
TAX MAP-PARCEL	00-00
SURFACE OWNER (SEE TABLE)	(A)
LEASE # (SEE WW-6A1)	

SCALE 1" = 1000' FILE NO. 8789EQT5HMAD.dwg  
 DATE NOVEMBER 29, 2023  
 REVISED  
 OPERATORS WELL NO. KNOB CREEK N-5HM  
 API WELL NO. 47-051-02032  
 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  
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COUNTY NAME  
 PERMIT