

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

API 47-033-05815H6A County Harrison District Harrison / Union
Quad West Milford 7.5' Pad Name KST5HS Field/Pool Name Kennedy Storage
Farm name JAMES IVAN MCDONALD Well Number KST5BHS
Operator (as registered with the OOG) CNX Gas Company LLC
Address P.O. Box 1248 City Jane Lew State WV Zip 26378

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,335,865.95 m Easting 545,523.87 m
Landing Point of Curve Northing 4,335,545.37 m Easting 545,218.52 m
Bottom Hole Northing 4,333,019.95 m Easting 546,108.91 m

Elevation (ft) 1154.29' 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)
N/A (Production hole has not been drilled.)

Date permit issued 07/25/2014 Date drilling commenced 02/17/2015 Date drilling ceased N/A (Drilling has not been completed.)
Date completion activities began N/A (Completion has not begun.) Date completion activities ceased N/A
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 135 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1570, 2355 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 80', 390', 1060', 1440 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

APPROVED

NAME: Sam Ward
DATE: 1/5/17

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CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	114'	N	J-55 94# / 114'	N/A	N (grout)
Surface	17 1/2"	13 3/8"	943.1'	N	J-55 54.5# / 943.1'	N/A	Y
Coal	-	-	-	-	-	-	-
Intermediate 1	12 1/4"	9 5/8"	2494'	N	J-55 36# / 2494'	N/A	Y
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	N/A	(Production hole	has not been	drilled.)	-	-	-
Tubing	N/A	(Tubing has not	been run.)	-	-	-	-
Packer type and depth set	None						

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Shurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	675	15.60	1.22	820	0'	24
Surface	Class A	766	15.61	1.21	927	0'	8
Coal	-	-	-	-	-	-	-
Intermediate 1	Class A	756	15	1.41	1067	0'	8
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	N/A	(Production hole	has not been	drilled.)	-	-	-
Tubing	N/A	(Tubing has not	been run.)	-	-	-	-

Drillers TD (ft) N/A (Drilling has not been completed.) Loggers TD (ft) N/A (Drilling has not been completed.)
 Deepest formation penetrated N/A (Drilling has not been completed.) Plug back to (ft) N/A (Drilling has not been completed.)
 Plug back procedure N/A (Drilling has not been completed.)

Kick off depth (ft) N/A (Drilling has not been completed.)

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 - No centralizers used.
Fresh Water - Bow spring centralizers on first joint then every fourth joint to 100 feet from surface.
Coal - Bow spring centralizers on first joint then every fourth joint to 100 feet from surface.
Intermediate - Bow spring centralizers one on the first two joints and every fourth joint until inside surface casing.

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS N/A (Well has not been completed.)

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS N/A (Well has not been completed.)

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A (Well has not been completed.)

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API 47-033-0561516A Farm name JAMES IVAN McDONALD Well number KSTJPHS

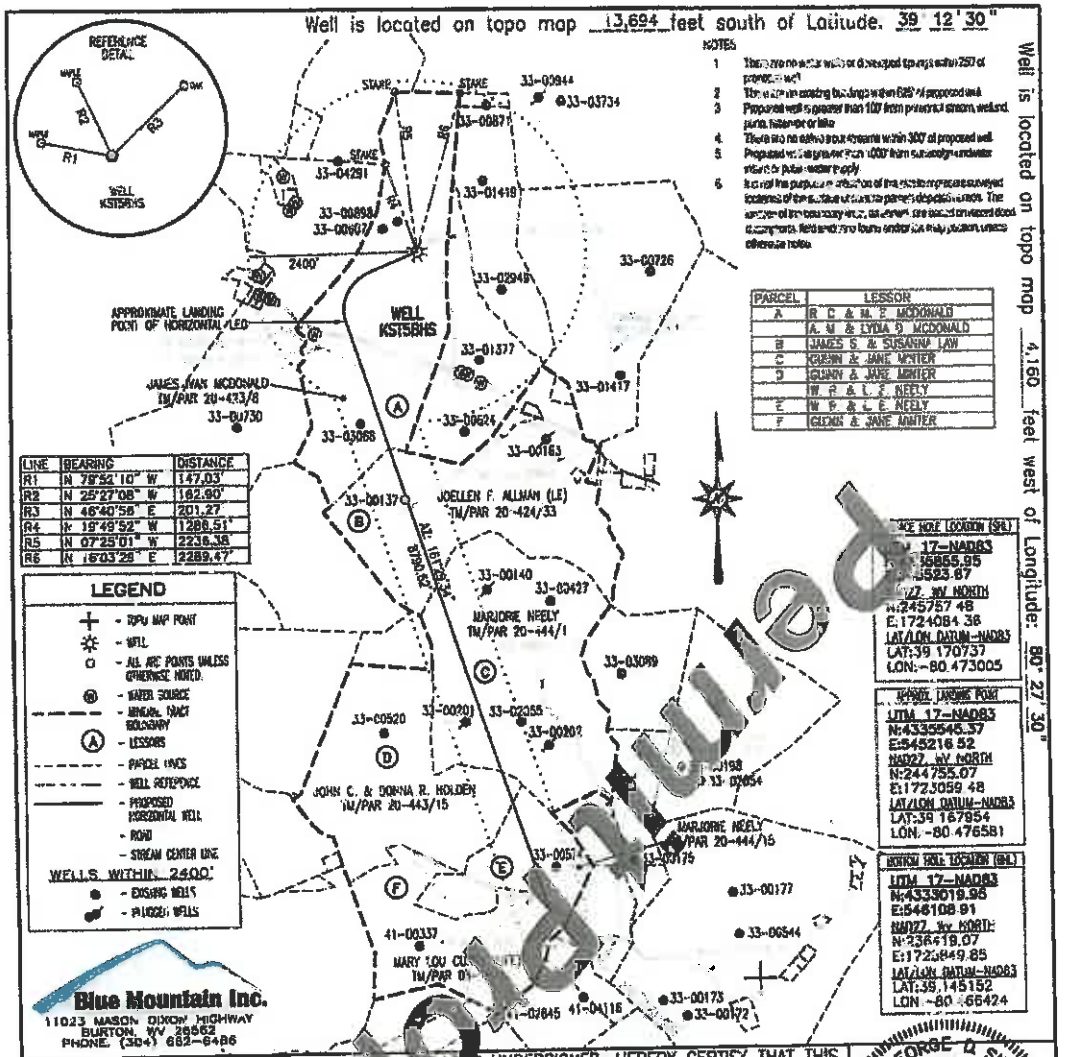
LITHOLOGY / FORMATION	TOP DEPTH IN FT		BOTTOM DEPTH IN FT		BOTTOM DEPTH IN FT MID	DESCRIBE ROCK TYPE AND RECORD QUANTITY TYPE OF FLUID (FRESHWATER, BRINE, GAS, H2S, ETC)
	TYD	MD	TYD	MD		
Shale/Coal	80	80	180			
Limestone/Shale/Siltstone	180	180	220			
Shale/Redrock/Siltstone	220	220	360			
Redrock/Siltstone	360	360	390			
Redrock/Siltstone/Coal	390	390	430			
Shale/Redrock/Siltstone	430	430	540			
SH/RR/Siltstone/Sandstone	540	540	600			
Shale/Redrock/Siltstone	600	600	660			
Stone: Lime, Silt. Sand	660	660	780			
SH/RR/Siltstone/Limestone	780	780	960			
Redrock/Sandstone	960	960	1040			
Sandstone	1040	1040	1080			
SH/Redrock/Siltstone/Coal	1080	1080	1240			
Shale/Redrock/Siltstone	1240	1240	1440			
Shale/Siltstone/Sandstone	1440	1440	1458			
Shale/Siltstone/Coal	1458	1458	1482			
Link Lime	1482	1482	1552			Light Gray
Big Lime	1552	1552	1671			Light Gray/Brown
Big Injun	1671	1671	1913			Light Gray
Gantz Sand / Gantz A	1913	1913	2059			Gray
50790 Foot Sands	2059	2059	2239			Varicolored
Gordon Sand	2239	2239	2359			Med Gray
Shale	2359	2359	2470			Dark Gray
Fifth Sand	2470	2470	2560			Med Gray
Bayard Sand	2560	2560	2647			Med Gray
Siltstone/Shale	2647	2647	2871			Med/Dark Gray

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Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 25662
 PHONE: (304) 682-6486

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS DRAWING IS CORRECT TO THE BEST OF MY KNOWLEDGE AND SHOWS ALL THE INFORMATION REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000

FILE #: KST5BHS
 DRAWING #: KST5BHS
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/1000
 PROVEN SOURCE OF ELEVATION: U.S.G. MOUNTAIN (3.5)

DATE: JULY 25, 2014
 OPERATOR'S WELL #: KST5BHS
 API WELL #: 47 33 05215 H6A
 STATE COUNTY PERMIT

WATERSHED: MIDDLE WEST FORK CREEK ELEVATION: 1154.29±
 COUNTY/DISTRICT: HARRISON / UNION QUADRANGLE: WEST MILFORD, WV 7.5'
 SURFACE OWNER: JAMES MAY McDONALD ACREAGE: 176.00±
 OIL & GAS ROYALTY OWNER: R. C. McDONALD & M. B. McDONALD; A. M. McDONALD & LYDA D. McDONALD ACREAGE: 781.86±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 7,170± TMD: 18,265±
 WELL OPERATOR: CNX GAS COMPANY LLC DESIGNATED AGENT: MATTHEW IMRICH
 Address: P.O. BOX 1248 Address: P.O. BOX 1248
 City: JANE LEW State: WV Zip Code: 26378 City: JANE LEW State: WV Zip Code: 26378

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PROFILE VIEW

API 47-033-05815H6A Farm Name JAMES IVAN MCDONALD Well Number KST5BHS

Profile View – Not Available – Drilling has not been completed

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DEVIATION SURVEY

API 47-033-05815H6A Farm Name JAMES IVAN MCDONALD Well Number KST5BHS

Deviation Survey – Not Available – Drilling has not been completed

FRAC FOCUS REGISTRY

API 47-033-05815H6A Farm Name JAMES IVAN MCDONALD Well Number KST5BHS

Frac Focus Registry – Not Available – Formations have not been perforated or stimulated

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DEPARTMENT

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KSTSHS

Well number

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47-035-05815H6A

API

LITHOLOGY / FORMATION	TOP DEPTH IN FT TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY TYPE OF FLUID (FRESHWATER, BRINE, GAS, H2S, ETC)
Fill	0	80			
Shale/Coal	80	180			
Limestone/Shale/Siltstone	180	220			
Shale/Redrock/Siltstone	220	360			
Redrock/Siltstone	360	390			
Redrock/Siltstone/Coal	390	430			
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Redrock/Sandstone	960	1040			
Sandstone	1040	1060			
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Shale/Siltstone/Sandstone	1240	1440			
Shale/Siltstone/Coal	1440	1458			
Little Lime	1458	1482			Light Gray
Big Lime	1500	1552			Light Gray/Brown
Big Injun	1600	1671			Light Gray
Gantz Sand / Gantz A	1852	1913			Gray
50/30 Foot Sands	1972	2059			Varicolored
Gordon Sand	2096	2239			Med Gray
Shale	2240	2359			Dark Gray
Fifth Sand	2360	2392			Med Gray
Bayard Sand	2447	2470			Med Gray
Siltstone/Shale	2471				Med/Dark Gray

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PROFILE VIEW

API 47-033-05815H6A Farm Name JAMES IVAN MCDONALD Well Number KST5BHS

Profile View – Not Available – Drilling has not been completed

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FRAC FOCUS REGISTRY

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