

Corrected 8-14-15

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

API 47-087-02538W County ROANE District REEDY
Quad LIVERPOOL Pad Name _____ Field/Pool Name Liverpool
Farm name JERRY VANCE Well Number E. L. FLEMING #2(re-work)
Operator (as registered with the OOG) KRAKROW, INC.
Address P. O. BOX 1007 City SPENCER State WV Zip 25276

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 692.815 Easting 1,823.503
Landing Point of Curve Northing N/A Easting N/A
Bottom Hole Northing _____ Easting _____

Elevation (ft) 982' 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)
NONE

Date permit issued 10/3/2012 Date drilling commenced 9/6/2012³ RE-WORK Date drilling ceased N/A
Date completion activities began 11/1/2013 Date completion activities ceased 2/18/2015
Verbal plugging (Y/N) N/A 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 EST. BEHIND 7'-90' & PITTSBURG 720' Open mine(s) (Y/N) depths NO
Salt water depth(s) ft SALT SAND 1975' & BIG DUNKARD 1400' Void(s) encountered (Y/N) depths NO
Coal depth(s) ft NO Cavern(s) encountered (Y/N) depths NO
Is coal being mined in area (Y/N) NO

Received
AUG 18 2015
Reviewed by: SH 10/23/2015
Office of Oil and Gas
WV Dept. of Environmental Protection

API 47-087 - 02538

Farm name JERRY VANCE

Well number E. L. FLEMING #2(re-work)

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							
Surface							
Coal							
Intermediate 1		7"	2220'		20#		EXISTING
Intermediate 2							
Intermediate 3							
Production		4 1/2"	2600'	NEW	J-55 10.5#		N
Tubing							
Packer type and depth set		4 1/2" ANCHOR PACKER SET 2.357" W.DISC.. 4 SQUEEZE HOLES @ 2.298'					

Comment Details 4 1/2" WAS SQUEEZE CEMENTED UP INTO 7", 4 1/2" WAS RAN TO TD BELOW PACKER AND PERFERD IN BEREA

CEMENT DATA	Class Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	TYPE I, CLASS A	65	15.6	1.18	77	1554'	72 HRS
Tubing							

Drillers TD (ft) 2616' Loggers TD (ft) 2514'
 Deepest formation penetrated BEREA Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

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 CBL/CCL/VDL

4 1/2" - 2122' - 1330'

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS FRACKED SHOT HOLE

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS 4 1/2" RAN THRU SHOT HOLE

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WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47-087-02538 Farm name JERRY VANCE Well number E. L. FLEMING #2(re-work)

PRODUCING FORMATION(S)	DEPTHS
BEREA	2590 TVD _____ MD _____
_____	_____
_____	_____
_____	_____

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 5 bpd NGL _____ bpd Water 5 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY FORMATION	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	TOP DEPTH IN FT	BOTTOM DEPTH IN FT	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESH WATER, BRINE, OIL, GAS, H ₂ S, ETC)
	NAME TVD	TVD	MD	MD	
	0		0		
					SEE WELL LOG ATTACHED
					Received
					AUG 18 2015
					Office of Oil and Gas WV Dept. of Environmental Protection

Please insert additional pages as applicable.

Drilling Contractor ROY G. HILDRETH AND SON, INC
Address P O BOX 1007 City SPENCER State WV Zip 25276

Logging Company NABORS COMPLETION & PRODUCTION SERVICES CO. AND GRAY WIRE LINE
Address P O BOX 975682 City DALLAS State TX Zip 75397-5682

Cementing Company ROY G. HILDRETH AND SON, INC.
Address P O BOX 1007 City SPENCER State WV Zip 25276

Stimulating Company UNIVERSAL WELL SERVICES, INC.
Address P O BOX 200969 City DALLAS State TX Zip 75320

Please insert additional pages as applicable.

Completed by JON R. HILDRETH Telephone 304-927-2130
Signature *Jon R. Hildreth* Title PRESIDENT Date 6/15/2015

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

10/23/2015

87-02538

Well No. 7 *E. L. Fleming* Farm 76 Acres
 Lease No. 99677 *County* *W. Va.* State
Hick Oil Co. Contractor *Hick Oil Co.* Contractor
 Drilling Commenced 9-20-1920 Drilling Completed 11-1-1920
 N. S. 36 E. W. 50 Elevation 976.5 Feet

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
1" Pbl.	694	797		
Water	735			
Little Sand	1174	1204		
Big Sand	1315	1395		
Sand	1504	1628		
Oil Shale		1600		
Water	1600			
Water & sand	1728	2120		
Water	2120	2146		
Big Sand	2146	2175		
Shale	2175	2180		
Sand	2180	2210		
Sand	2213	2244		
Shale & shells	2244	2570		Shale 15-20 in. to 2 ft @ 1600-2100 Hill Bridge
Brown Shale	2570	2585		
Sand	2585	2608		
Oil Pay	2591	2593		
Oil Pay	2599	2606		
Total Depth		2616		

Leased from the Hick Oil Company on 11-14-25

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

Size	Put in Wall		Pulled Out		Left in Wall		Shot Date 11-1-20	Amount 60 lbs.	Sand 2539	Result
	Feet	In.	Feet	In.	Feet	In.				
10"	960		960				6-21-37	60 lbs.	2608 ft.	Hill Bridge
8 1/4"	1265		1265							
6 7/8"	2214									
6 7/8"	used steel and 6 7/8" csg.									

Production First 24 Hours.....Bbla. Gas Test:.....
 Approved by..... Superintendent

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