

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

API 47 - 087 - 04721 County ROANE District REEDY
Quad LIVERPOOL Pad Name _____ Field/Pool Name _____
Farm name JERRY VANCE Well Number E. L. FLEMING #4 (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 692,294 Easting 1,824,439
Landing Point of Curve Northing N/A Easting N/A
Bottom Hole Northing _____ Easting _____

Elevation (ft) 936' 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 8/10/2012 Date drilling commenced REWORK Date drilling ceased N/A
Date completion activities began 4/15/2013 Date completion activities ceased 2/10/2015
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug **JUL 06 2015**

Freshwater depth(s) ft EST. BEHIND 7" - 90' & PITTSBURG 680' Open mine(s) (Y/N) depths NO
Salt water depth(s) ft EST. 1930' 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

Reviewed by:
JUL 7/24/15
08/14/2015

API 47-087 - 04721

Farm name JERRY VANCE

Well number E. L. FLEMING #4 (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"	2175'	EXISTING	20#		EXISTING
Intermediate 2							
Intermediate 3							
Production		4 1/2"	2636'	NEW	J-55 11.6#		
Tubing							
Packer type and depth set		7" X 4" ANCHOR PACKER SET 2,460 W/DISC, SQUEEZE CEMENTED ABOVE PACKER UP INTO 7"					

Comment Details _____

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		15.6	1.18		2156' EST	72 HRS
Tubing							

Drillers TD (ft) 2636' Loggers TD (ft) 2604' INSIDE 4 1/2"

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 CCL, CBL
4 1/2" - 2130', 2094'

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS 4 1/2" WAS RAN TO TD BELOW PACKER AND PERFERD IN BEREA, O.H. BEHIND 4 1/2"

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

~~ROA-2539~~

Well No. 3 *F. L. Fleming* Farm 76 Acres
 Lease No. 79677 *Rudy* ^{Township} District *Round* County *H. Va.* State
 Hick Oil Co Contractor *Hick Oil Co* Contractor
 Drilling Commenced *7-22-1921* Drilling Completed *11-2-1921*
 N. S. E. W. Elevation Floor *930.6*

Rock Formation	Top	Bottom	Steel Line Measurement	Remarks
Water	85			
Pgh. Sand	654	757		
Water	740			
Little Dunhard	1400	1240		
Big Dunhard	1270	1359		
Water	1325			
Sand	1425	1508		
Sand	1545	1590		
Lime	1665	1910		
Sand	1910	2088		
Water	1925			
Big Lime	2088	2138		
Big Limestone	2138	2156		
Slate	2156	2159		
Lime	2159	2180		
Slate & Shells	2180	2523		
Brown Shale	2523	2541		
Beal	2541	2555		
Oil & Gas	2543	2555		
Blue Lime	2555	2561		
Total Depth		2561		

Purchased from the Hick Oil Co. on 11-14-35

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT.

Put In Well		Pulled Out		Left In Well		Shot Date ?	
Size	Feet	In	Feet	In	Feet	In	
10"	917		917				12-12-37
8 1/4"	1750		1750				80 gts.
6 7/8"	2161						2550-2555
							Result
							Packer Size
							Depth Set

Production First 24 Hours Bbls. Gas Test

Approved by

Superintendent

08/14/2015