

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

API 47-033-04095 F County HARRISON District TEN MILE  
Quad WOLF SUMMIT 7.5' Pad Name HIRAM LYNCH Field/Pool Name WOLF SUMMIT  
Farm name JOHNSON, CHAD W. ET. AL. Well Number 47  
Operator (as registered with the OOG) EAST RESOURCES INC.  
Address P.O. BOX 5519 City VIENNA State WV Zip 26105

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,348,459 M Easting 544,961 M  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4,348,143 M Easting 544,797 M

Elevation (ft) 1,207' 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

Date permit issued 4/6/10 Date drilling commenced N/A Date drilling ceased N/A  
Date completion activities began 4/14/10 Date completion activities ceased 4/15/10  
Verbal plugging (Y/N) N Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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

Freshwater depth(s) ft None Open mine(s) (Y/N) depths N  
Salt water depth(s) ft None Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 362'- 370' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:  
\_\_\_\_\_

**APPROVED**

NAME: Jacquelin Thornton  
DATE: 3/22/2016

04/01/2016

API 47-033 - 04095 Farm name JOHNSON, CHAD W. ET. AL. Well number 47

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	11"	8 5/8"	444.85'	existing	LS		Existing
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	7 7/8"	4 1/2"	3113.7'	existing	J-55		Existing
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

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 (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	145	15.6	1.18	171	Surface	
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	200	14.2	1.27	254	Existing	
Tubing							

Drillers TD (ft) \_\_\_\_\_ Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated Fifth Sand Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) Existing

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 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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 \_\_\_\_\_





**BJ Services Company**



CUSTOMER (COMPANY NAME) East Resources, Inc.				CREDIT APPROVAL NO. A55381000222		PURCHASE ORDER NO.		CUSTOMER NUMBER 20050881 - 00202116		INVOICE NUMBER				
MAIL INVOICE TO		STREET OR BOX NUMBER P.O.Box 5519			CITY Vienna		STATE West Virginia		ZIP CODE 26105					
DATE WORK COMPLETED	MO. 04	DAY 15	YEAR 2010	BJ REPRESENTATIVE CHRISTOPHER R DEEL		WELL API NO: 47033040950000		WELL TYPE : New Well						
BJ SERVICES DISTRICT Dunbar				JOB DEPTH (ft) 3,050		WELL CLASS : Gas								
WELL NAME AND NUMBER LYNCH HIRAM #47				TD WELL DEPTH (ft) 3,050		GAS USED ON JOB : No Gas								
WELL		LEGAL DESCRIPTION			COUNTY/PARISH Harrison		STATE West Virginia		JOB TYPE CODE : Fracture 0 - 9,999 PSI					
PRODUCT CODE	DESCRIPTION				UNIT OF MEASURE	QUANTITY	LIST PRICE UNIT	GROSS AMOUNT	% DISC.	NET AMOUNT				
100002	Sand, White, 20/40				cwt	124								
100091	Ferrotrol 300L				gals	1								
100472	NE-940, drum				gals	1								
398004	HCl, 10.1 - 15%				gals	250								
398061	GBW-15L				gals	3								
398381	Enzyme G-NE				gals	10								
411323	GW-3LDF				gals	44								
488007	BF-7L				gals	8.5								
488137	Claytreat 3C				gals	9								
488252	Magnaclde 575				gals	0.5								
488430	InFlo 250W				gals	9								
488473	NE-940, bulk				gals	5.5								
499779	Cl-14				gals	1								
499796	XLW-32				gals	8.5								
499808	Clay Master-5C				gals	1								
	SUB-TOTAL FOR Product Material													
A154	Personnel Surcharge - Frac 1501-5000				ea	1								
F301A	Std Sand Proportioning, 0 - 10 Bpm				2hrs	1								
ARRIVE LOCATION :	MO. 04	DAY 15	YEAR 2010	TIME 13:30	SERVICE ORDER: I AUTHORIZE WORK TO BEGIN PER SERVICE INSTRUCTIONS IN ACCORDANCE WITH THE TERMS AND CONDITIONS PRINTED ON THE LAST PAGE OF THIS FORM AND REPRESENT THAT I HAVE AUTHORITY TO ACCEPT AND SIGN THIS ORDER.				SERVICE RECEIPT: I CERTIFY THAT THE MATERIALS AND SERVICES LISTED WERE RECEIVED AND ALL SERVICES PERFORMED IN A WORKMANLIKE MANNER.					
CUSTOMER REP. DUSTIN HENDERSHOT									CUSTOMER AUTHORIZED AGENT			X		
SEE LAST PAGE FOR GENERAL TERMS AND CONDITIONS									CUSTOMER AUTHORIZED AGENT			BJ SERVICES APPROVED		