



---

west virginia department of environmental protection

---

Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

## PERMIT MODIFICATION APPROVAL

March 11, 2016

CUNNINGHAM ENERGY, LLC  
3230 PENNSYLVANIA AVENUE  
CHARLESTON WV 25302

Re: Permit Modification Approval for API Number 1502904, Well #: KING 18H

### ADDITIONAL ADDITIVES TO BE USED IN DRILLING

Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gene Smith', is written over a faint, larger signature.

Gene Smith  
Assistant Chief of Permitting  
Office of Oil and Gas

Promoting a healthy environment.

03/11/2016

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name CUNNINGHAM ENERGY, LLC OP Code 494508594

Watershed (HUC 10) TRIBUTARY OF WADE FORK Quadrangle ELKHURST 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: DRILL CUTTINGS; FLUIDS FROM DRILLING AND FRACTURING

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 30 MIL

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- \_\_\_\_ Reuse (at API Number \_\_\_\_\_ )
- \_\_\_\_ Off Site Disposal (Supply form WW-9 for disposal location)
- \_\_\_\_ Other (Explain \_\_\_\_\_ )

Will closed loop system be used? If so, describe: NO

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. AIR, FRSHWATER, DRILLING MUD

-If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_ (INTERMEDIATE SECTION)

Additives to be used in drilling medium? SOAP; KCL; CLAY STABILIZER; EVAP SALT; XCIDE-102; MIL STARCH; XANPLEX D;

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. LEAVE IN PIT/HAUL IF NEEDED

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) CEMENT & LIME

-Landfill or offsite name/permit number? CITY OF CHARLESTON LANDFILL

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature] MAR 09 2016

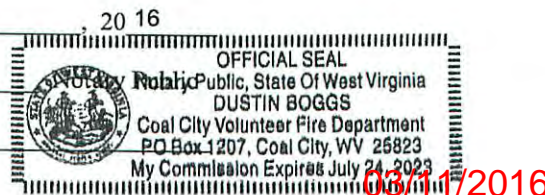
Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title PRESIDENT

Subscribed and sworn before me this 4 day of MARCH

DUSTIN BOGGS [Signature]

My commission expires 07/24/2023



03/17/2016

WW-9  
Part II

API Number 47-15-02904  
Operators Well No. King 18H

ADDITIONAL ADDITIVES TO BE USED IN DRILLING MEDIUM:

CAUSTIC SODA  
MIL-PAC R  
SODA ASH LIGHT  
SODIUM CHLORIDE

RECEIVED  
OFFICE OF OIL AND GAS

MAR 09 2016

03/11/2016

REP\_TRANSDUCTION\_NEW  
 420664/01/00  
 SRRP BARGE

OPER HEADS

Page: 1  
 Date: 02/25/2016  
 Time: 16:58:29

Detail Well Report by Material

Sales Organization 1030 B4 Oilfield Opr  
 Division 20 Baker Hughes INTEQ  
 Well 61049176 KING 201

Customer	Customer Item	Material	Material Description	Delivery	Item	Ship Date	Quantity	Unit Price	Extended Price	Dist. Invoice No	Invoice date
		1000466	Drill Fluid Rvc Service Product	00000	01/09/0000		0.000	0.00	0.00	1679	00/00/0000
		Subtotal for Material 1000466					0.000		0.00		
		1000736	W49 Drilling Fluids Engineer	00000	01/00/0000		0.000	850.00	0.00	1679	00/00/0000
				00000	02/00/0000		0.000	350.00	0.00	1679	00/00/0000
		Subtotal for Material 1000736					0.000		0.00		
		1021296	Solids Control Equipment Service Product	00000	00/00/0000		0.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1021296					0.000		0.00		
		1034736	Liquid material processing equip ser prod	00000	00/00/0000		0.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1034736					0.000		0.00		
		Subtotal for Customer					0.000		0.00		
4022090	CUNNINGHAM ENERGY LLC										
		1000670	SHLEES	812014364	000190	02/24/2016	10.000	12.50	125.00	1679	00/00/0000
				812014504	000190	02/24/2016	10.000	12.50	125.00	1679	00/00/0000
				812014527	000190	02/24/2016	10.000	12.50	125.00	1679	00/00/0000
		Subtotal for Material 1000670					30.000		375.00		
		1000672	SHLEEK WARPING	812014394	000190	02/24/2016	10.000	12.00	120.00	1679	00/00/0000
				812014504	000190	02/24/2016	10.000	12.00	120.00	1679	00/00/0000
				812014527	000190	02/24/2016	10.000	12.00	120.00	1679	00/00/0000
		Subtotal for Material 1000672					30.000		360.00		
		1000654	PLIERS FREIGHT CHARGE	812014384	000190	02/24/2016	7.000	130.00	910.00	1679	00/00/0000
				812014504	000190	02/24/2016	7.000	130.00	910.00	1679	00/00/0000
				812014527	000190	02/24/2016	7.000	130.00	910.00	1679	00/00/0000
		Subtotal for Material 1000654					21.000		2,730.00		
		1007322	MIL-CR8 5, 5/16 B/C	812014384	000090	02/24/2016	50.000	25.00	1,250.00	1679	00/00/0000
		Subtotal for Material 1007322					50.000		1,250.00		
		1019715	WESS-12-01 150 GAL TANK 10'x30x6'	812006450	000043	02/22/2016	1.000	96.26	96.26	1763	00/00/0000
		Subtotal for Material 1019715					1.000		96.26		
		1019721	WESS-35 STAIN EX	812006450	000043	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1019721					1.000		0.00		
		1019690	SKS4 1288100 503, 1/4", API 5B, 00	812014465	000010	02/24/2016	8.000	330.53	2,644.24	1763	00/00/0000
		Subtotal for Material 1019690					8.000		2,644.24		
		10013634	STAIN LIGHT, 50 LB, B/C	812014384	000010	02/24/2016	10.000	13.72	137.20	1679	00/00/0000

RECEIVED  
 OFFICE OF OIL AND GAS

MAR 09 2016

03/11/2016

ZIL TRNGCPCGCEM\_NN  
 479491/BA/100  
 SUPP REPORT

ORDER HEADER  
 Detail Well Receipt by Material

Page: 2  
 Date: 02/25/2016  
 Time: 16:59:25

Sales Organization: 1000 BH Oilfield Ctr  
 Division: 20 Bases (High Pressure)  
 Well: GUSM176 KING 204

Quantity	Customer Name	Material	Material Description	Delivery	Rate	Ship Date	Quantity	Unit Price	Extended Price	Plant Location	PO Invoiced Date
		Subtotal for Material 1023064					30.000		306.60		
		1023066	(2)SPEEFT06) SPIND, SHALE SHWER HAWSO	812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
				812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1024268					2.000		0.00		
		1024267	REINFORCING TANK, OPEN TOP, 150-180 GAL.	812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1024327					1.000		0.00		
		1024333	(2)SPINDR006) TRNK, SR 155 GAL, WITH HOLES,	812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1024393					1.000		0.00		
		1024324	83215-11-503 16 PLS-503 HIGH G DRYDRG	812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
				812006450	00000	02/22/2016	1.000	0.00	0.00	1763	00/00/0000
		Subtotal for Material 1029024					2.000		0.00		
		1029056	MIL-SPEE 410, 1000 LB PULK EPG	812014384	00000	02/24/2016	3.000	499.35	1,498.05	1679	00/00/0000
				812014384	00000	02/24/2016	10.000	499.35	4,993.50	1679	00/00/0000
		Subtotal for Material 1038166					13.000		5,971.55		
		1043735	EMPOURED SALT, 3000 LB EPG	812014504	00000	02/24/2016	10.000	411.69	4,116.90	1679	00/00/0000
		Subtotal for Material 1043736					10.000		4,116.90		
		103020025P	NON-FLEX D 25 LB EPG	812014384	00000	02/24/2016	40.000	142.69	5,707.20	1679	00/00/0000
		Subtotal for Material 104200025P					40.000		5,707.20		
		100740002P	MIL-EPG 11, 50 LB EPG	812014384	00000	02/24/2016	36.000	144.85	5,214.60	1679	00/00/0000
		Subtotal for Material 100740002P					36.000		5,214.60		
		100750002P	MIL-EPG 50 LB EPG	812014384	00000	02/24/2016	50.000	64.94	3,247.00	1679	00/00/0000
		Subtotal for Material 100750002P					50.000		3,247.00		
		101340002P	NEW-GRILL 5 GAL. CRN	812014384	00000	02/24/2016	16.000	107.03	1,712.48	1679	00/00/0000
		Subtotal for Material 101340002P					16.000		1,712.48		
		102016002P	X-CIDE 102 5 GAL.	812014384	00000	02/24/2016	16.000	142.56	2,282.88	1679	00/00/0000
		Subtotal for Material 102016002P					16.000		2,282.88		
		103364002P	WARRANT FILM MED 50 LB EPG	812014384	00000	02/24/2016	50.000	35.03	1,751.50	1679	00/00/0000
		Subtotal for Material 103364002P					50.000		1,751.50		
		103750002P	W.O. DEFOM 5 GAL. CRN	812014384	00000	02/24/2016	16.000	73.16	1,250.56	1679	00/00/0000

RECEIVED  
 OFFICE OF OIL AND GAS

MAR 09 2016

03/11/2016

ZER\_TERRACORRUPEN\_NEW  
 ADM/GR/GR/100  
 SUNG\_REGION

EWER HUPES  
 Detail Well Recp by Material

Page: 3  
 Date: 02/26/2016  
 Time: 16:50:29

Sales Organization 1030 BH Oilfield Ops  
 Division 20 Baker Hughes Int'l  
 Well 61048175 ENE2 2H

Customer	Customer Name	Material	Material Description	Delivery	Item	Ship Date	Quantity	Unit Price	Extended Price	Plant Invoice to Invoice date
		Subtotal for Material N375000551					16.000		1,250.56	
		N366100501	MCL-L24, 50 LB PFG	812010304	000010	02/24/2016	25.000	15.72	418.00	15/9 02/02/2000
		Subtotal for Material N366100500					25.000		418.00	
		N361000501	SELEM HUPRENFAS 50 LB PFG	812010304	000110	02/24/2015	49.000	24.48	1,195.52	15/9 02/02/2000
		Subtotal for Material N361000501					49.000		1,195.52	
		Subtotal for Customer 40120040					506.000		40,877.29	
		Total for the Well 61048175					506.000		40,877.29	

RECEIVED  
 OFFICE OF OIL AND GAS

MAR 09 2016

03/11/2016