WR-37 REV. 5/01 Operator's Well Number

State County Permit

API Well No.: 47- 101815 - 1916611

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENT-OFFICE OF OIL AND GAS PRE-OPERATION CERTIFICATE FOR LIQUID INJECTION OR WASTE DISPOSAL WELL

	TOR A		19 -	NJ 203		AGENT 71 Idress Pu Bix	244	KIFF/M, KE
GEOLOGICAL	TARGE	T FORM/	TION /	MARIRI	lus Depth Gi	64 feet(top) to	6250 feet(b	oottom)
		ressure in t			psig			
			-	ir pressure:				
	ion interva				Open-hole	intervals		
		ED INJEC on pressure:		ERATIONS psig		le pressure:	psig	
DETAILED ID				IALS TO	BE INJECTED			
		cted for oil	recovery:					
Wastes	to be disp	osed of:	MAR	cielly	And FORM	Ation Abou	is to inju	.t water
Additiv	es (Slurry	mediums	inhibitors	solvents ov	idizers, deoxidizers,	etc.)		
							- / - 1	2 7/
					IND OTHER CORI	ROSION CONTR	OL LINES	21/8
204tml	1	DK Y	~144	· Nanla	Ltoxy		STREET, THE STREET, ST	
ADDITIONAL	DRILLIN	G AS PAI	et of th	E CONVE	RSION (Complete	form U/D 25)		
					100	tottii wk-33)		
the new casing ar	EW CAS	ING AND program is	TUBING described	PROGRA on a form V	M AS PART OF TI VR-35, submitted in	IE CONVERSIO	N (To be complete permit to which	eted below unless this form WR-37
the new casing ar relates.) CASING OR TUBING TYPE	SIZE	GRADE	TUBING described WEIGHT PER FT.	PROGRA on a form V	VR-35, submitted in	IE CONVERSIO	CEMENT USED	PACKERS (KIND, SIZE, DEPTH SET)
the new casing arrelates.)  CASING OR  TUBING TYPE  CONDUCTOR	SIZE	program is	described	on a form V	VR-35, submitted in ED FOOTAGE USED IN DRILLING	HE CONVERSIO connection with the	CEMENT	PACKERS (KIND, SIZE,
the new casing at relates.)  CASING OR TUBING TYPE  CONDUCTOR  FRESH WATER	nd tubing	program is	described	on a form V	VR-35, submitted in ED FOOTAGE USED	HE CONVERSIO connection with the	CEMENT	PACKERS (KIND, SIZE,
the new casing at relates.)  CASING OR TUBING TYPE  CONDUCTOR  FRESH WATER	SIZE	program is	WEIGHT PER FT.	on a form V	VR-35, submitted in ED FOOTAGE USED IN DRILLING	FOOTAGE LEFT IN WELL	CEMENT	PACKERS (KIND, SIZE,
the new casing at relates.)  CASING OR TUBING TYPE  CONDUCTOR  FRESH WATER  COAL	SIZE	program is	described	on a form V	VR-35, submitted in ED FOOTAGE USED IN DRILLING	HE CONVERSIO connection with the	CEMENT	PACKERS (KIND, SIZE,
the new casing at relates.)  CASING OR TUBING TYPE  CONDUCTOR  FRESH WATER  COAL  INTERMEDIATE	SIZE	program is	WEIGHT PER FT.	on a form V	VR-35, submitted in ED FOOTAGE USED IN DRILLING	FOOTAGE LEFT IN WELL	CEMENT USED	PACKERS (KIND, SIZE, DEPTH SET)
the new casing at relates.)  CASING OR TUBING TYPE  CONDUCTOR	SIZE	GRADE	WEIGHT PER FT.	on a form V	VR-35, submitted in ED FOOTAGE USED IN DRILLING  130	FOOTAGE LEFT IN WELL	CEMENT	PACKERS (KIND, SIZE, DEPTH SET)

ARRIVERT 1- DRUDGETURE PACKER

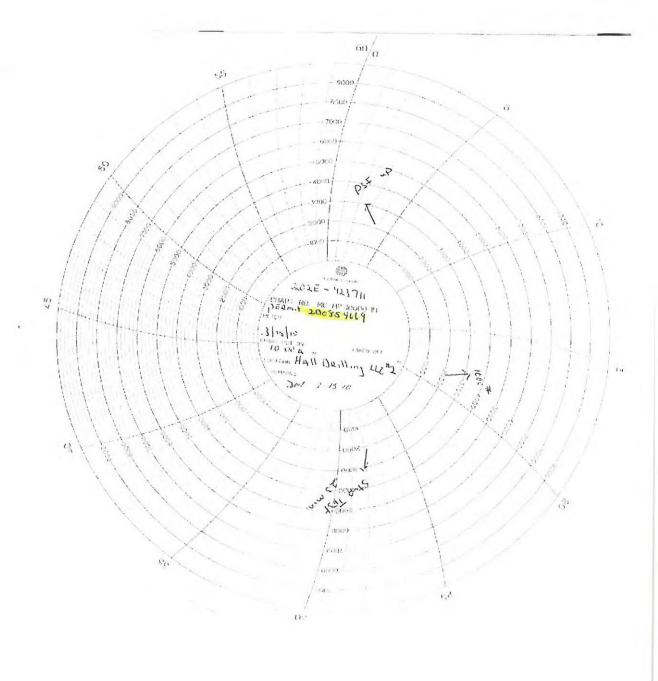


WR37

Pump to 1000 WEll	held 1968 Fee 23	min Step TES
WEIL OK.		, , ,
C		
	M.o.l.	
The undersigned certifies that the test was mechanical integrity of the well. The test was	performed on Mach 15	, 20 <u>10</u> and demon
The undersigned certifies that the test was mechanical integrity of the well. The test with Office of Oil and Gas.	performed on Mach 15 was witnessed by Down WE	, 20 <u>10</u> and demon
mechanical integrity of the well. The test v	performed on Mary 15 was witnessed by Down WS	
mechanical integrity of the well. The test with the Office of Oil and Gas.	performed on March 15 was witnessed by Down Was  3/15/2010 Date	
mechanical integrity of the well. The test v	was witnessed by David W/3	
mechanical integrity of the well. The test with the Office of Oil and Gas.	was witnessed by Double Williams	
mechanical integrity of the well. The test well the Office of Oil and Gas.  Well Operator	was witnessed by Double Williams	

[NOTE: That the mechanical integrity of this well must be demonstrated again within ninety (90) days of five years from this date in order for injection to continue. Please notify the state inspector 24 hours in advance of the test].

HALL ORILLING LLE
Well Operator
By: TERRY WY JAFF
Its FIRM SUPERVISOR



WR-37	
<b>REV. 5/01</b>	

Witness : Dould Cowan

15. 2010 Date: Operator's Well Number State County Permit API Well No .: 47- 085 - 09669 UIC 200859669

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENT-OFFICE OF OIL AND GAS PRE-OPERATION CERTIFICATE FOR LIOUID INJECTION OR WASTE DISPOSAL WELL

SEOLOGICAL TARGET FORMATION A CAN Depth CILY feet(top) to CAND feet(botto Virgin reservoir pressure in target formation
Source of information on virgin reservoir pressure:  Perforation intervals  Open-hole intervals  MAXIMUM PERMITTED INJECTION OPERATIONS  Well head injection pressure: psig Bottom hole pressure: psig  Volume per hour:  DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED  Liquids to be injected for oil recovery:  Wastes to be disposed of: ARCANNA FORMATICAL ADME TO INVELTE
Perforation intervals  [AXIMUM PERMITTED INJECTION OPERATIONS  Well head injection pressure: psig Bottom hole pressure: psig  Volume per hour:  ETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED  Liquids to be injected for oil recovery:  Wastes to be disposed of: ARCIND AND FORMATION AND TO INVESTIGATION.
Well head injection pressure:psig Bottom hole pressure:psig Volume per hour:  ETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED  Liquids to be injected for oil recovery:  Wastes to be disposed of:  ARCAIND AND FORMATION ABOVE TO INJECTED
Well head injection pressure:psig Bottom hole pressure:psig Volume per hour:  ETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED  Liquids to be injected for oil recovery:  Wastes to be disposed of:
Wastes to be disposed of: MARCININ And FORMATION Above to injust
Wastes to be disposed of: MARCHING And FORMATION Above to injust
19 19 19 19 19 19 19 19 19 19 19 19 19 1
Additives (Slurry mediums, inhibitors, solvents, oxidizers, deoxidizers, etc.)
:
PETERCATIONS FOR CATHODIS PROPERTY AND STATE OF THE STATE
ECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL LINE!
Control P.DR with insolatory
DITIONAL DRILLING AS PART OF THE CONVERSION (Complete form WR-35)
TAIL CON MEM CACING AND MIDDING DESCONAR AG NAME OF STREET
TAILS ON NEW CASING AND I UBING PROGRAM AS PART OF THE CONVERSION (To be completed
new casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this
new casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this
new casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this stes.)  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE USED FOOTAGE LEFT CEMENT P.
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snew casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this stes.)  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE USED FOOTAGE LEFT CEMENT PARTY.  BING TYPE PER FT. IN DRILLING IN WELL USED ()
snew casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this sites.)  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE USED FOOTAGE LEFT CEMENT PARTYPE PER FT. IN DRILLING IN WELL USED (I
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new casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this sites.)  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE USED FOOTAGE LEFT CEMENT PERG TYPE IN DRILLING IN WELL USED OF THE PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT. IN DRILLING IN WELL USED OF THE PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT. IN DRILLING IN WELL USED OF THE PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT. IN DRILLING IN WELL USED OF THE PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING TYPE IN DRILLING IN WELL USED OF THE PER FT.  SING TYPE TO THE PER FT. IN DRILLING IN WELL USED OF THE PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE LEFT CEMENT PER FT.  SING OR SIZE GRADE WEIGHT NEW USED FOOTAGE USED FOOTAGE LEFT CEMENT PER FT.  SING TYPE TO THE PER FT.  SING