

DATE: API#: 47 033 03088F

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

m name: Thompson, Arnett	Opera	uor Well No.:_	439	·	添	
CATION: Elevation: 1252.50	Quadi	rangle:	Salem	·		
District: <u>Tenmile</u> .	Coun	nty:	Harrison		왕	
Latitude: 15,090 Feet South of 39 I	Ocg. 17					
Longitude 4,010 Feet West of 80	Deg. 32	Min_ 30)Sec.			
ompany: Dominion Exploration & Pro	duction	. Inc.		100		
P O Box 1248	sing &	Used in	Left in well	Cement fill	¥	
	bing	drilling		up Cu. Ft.		8.3
ldres:	-			*	-	())
7 Piggs					_ =	
ron: Rodney J. Biggs					- ₽	
spector: Tim Bennett					-	
McPermit Issued: 5/18/2001		See Orig	inal WR-3	for ex	isting	
Me Well Work Commenced:		casing	program.			
ate Well Work Completed: 12/31/2002		04,022.79	<u> </u>			
erbal Plagging: N/A					€	
ate Permission granted on: N/A					-	
Rotary Cable X Rig			<u> </u>	Pos	-	
Total Depth (feet):					FEW.W.	ì
Fresh Water Depth (ft.): N/A					— Office of Oil 6 class - Permitting	ř Ř
Salt Water Depth (ft.): N/A				tha		r) }
Sait Water Depta (16): N/A		1			IFEB 0 + 2002	9
coal being mined in area (N/Y)? N	c,					li li
bal Depths (ft.): N/A					W Coperanous of	
on Dipto (th). It can		1901		الله الاستادات المستادات المستادات المستادات المستادات المستادات المستادات المستادات المستادات المستادات المست المستادات المستادات	nvironmentel Protection	9
OPEN FLOW DATA						
5th Sand	Dane	one denth (A)	3150-315 2838-285	8 1		
Producing formation Gordon	Fay 2	ois asha (v)	2030 203 N1/#	•		-
Gas: Initial open flow MCF/d Oil: Ini	tial open H	OM O D	ONG.			
Final open flow 474 MCF/d Fina	al open flov	v <u>0</u> 13		31		
Time of open flow between initial and fina	1 tests 1	2 Hour	s 🤟 -			
Ctatic rock Pressure 390 psig (surface)	pressure) al	fter <u>12</u> Ho	urs		· · · · · · · · · · · · · · · · · · ·	
*Comingled with previous form	mations				1(4)	
Second producing formation	Pay zo	ne depth (ft)				
Gas: Initial open flow MCF/d Oil: In	itial open fl	lowl	36Va			
Final open flow MCF/d Fin	al open flor	w I	3PN4			
Time of open flow between initial and fine	al tests	Hou	rs	2		7
Static rock Pressure psig (surface	pressure) a	ificiH	ours	20		7
				e e e e e e e e e e e e e e e e e e e		
NOTE: ON BACK OF THIS FORM PUT THE FO	OLTOMING	3: 1). DETAIL	S OF PERFORA	MED	6	(
INTERVALS, FRACTURING OR STIMULATING	g, physic	AL CHANGE,	EIC, 2), THE	WELL		Č
LOG WHICH IS A SYSTEMATIC DETAILED	GEOLOGIC	AL RECORD	OF ALL FORM	ישוטעט,		C
INCLUDING COAL ENCOUNTERED BY THE Y		,				(
· Kn	d B	yes /			MAR OBJUDE	•
Signed:			. <i>D</i>	92		
Signed:	31/02		N-		- 8	
pate	-1 /		• - •			

3088 F

COMPANY/WELL NO.: CNGP 439
12/31/01 PERFED AND FRACED AS FOLLOWS:

01/28/2002

5TH SAND, 3150 - 3158', 20 HOLES, BD 2314#, AVG RATE 21 BPM, AVG PRESS 2025#, 225 BBLS, TOT SAND

10,000#, ISIP 1640#

GORDON, 2838 - 2850', 22 HOLES, BD 2845#, AVG RATE 20 BPM, AVG PRESS 2664#, 385 BBLS, TOT SAND 25,500#, ISIP 2430#



IV-35 (Rev 8

DIL & GAS DIVISION

DEPT. OF MINES

State of Mest Birginia

Bepartment of Mines Gil und Cas Bivision

Date_	January 28, 1985
Opera	tor's
Well	No. CNGD WN 439
	G. M. Thompson
	0. 47 - 033 - 3088

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WEIL TYPE: Oil $_{ m X}$ / Gas $_{ m /}$ Liquid Injection (If "Gas," Production $_{ m /}$ Underground	/ wasti ind Storage	e Disposar e/ Deep	/ Sha	llow/)
LOCATION: Elevation: 1258' Watershed	Coburn For	k		
District: Tenmile County Ha	rrison	Quadrangle	Salem_	7.51
COMPANY CNG DEVELOPMENT COMPANY				<u> </u>
ADDRESS P.O.Box 15746, Pittsburgh, PA 15244	Casing	Used in	Left	Cement fill up
DESIGNATED AGENT Gary A. Nicholas	Tubing	Drilling	in Well	Cu. ft.
ADDRESS Rt. 2 Box 698, Bridgeport, WV 26330	Size			
SURFACE OWNER Lester Thompson	20-16 Cond.	18	18	To Surf.
ADDRESS Rt. 1. Salem. WV 26426	11-3/4 *****	130	130	To Surf.
MINERAL RIGHTS OWNER John R. Morris	9 5/8			
ADDRESS	8 5/8	1289	1289	To Surf
OIL AND GAS INSPECTOR FOR THIS WORK	7			
Stephen Casey ADDRESS Rt. 2 Box 232-D 378	5 1/2			
PERMIT ISSUED 10-26-84	4 1/2	5625	5625	165 sks.
DRILLING COMMENCED 1-2-85	3			
DRILLING COMPLETED 1-10-85	2 1-1	5459	5459	
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION Alexander		Dep	oth 5645	feet
Depth of completed well 5654 feet	Rotary	/ Cabl	e Tools_	
Water strata depth: Fresh 110 feet;	Salt_	feet	:	
Coal seam depths: 875 - 882	_ Is coal	being mir	ned in th	e area? <u>No</u>
OPEN FLOW DATA				22
Producing formation <u>Alexander</u>	Pa	y zone dej	oth 5474-	₅₄₈₂ feet
Gas: Initial open flow Mcf/d	Oil: In	itial oper	n flow	Bbl/d
Final open flow 231 Mcf/d	Fi	nal open :	flow	Bbl/d
Time of open flow between ini	tial and f	inal test	sh	ours
Static rock pressure 1050 psig(surfa	ce measure	ment) aft	er 24 ho	ours shut in
(If applicable due to multiple completio				
Second producing formation	Pa	ay zone de	pth	feet
Gas: Initial open flow Mcf/d	Oil: I	nitial ope	n flow	Bb1/d
Final open flowMcf/d	Oil: F	inal open	flow	Bbl/d
Time of open flow between ini	tial and	final test	.s}	ours
Static rock pressurepsig(surface				
				reverse side

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. Allegheny Perforated Alexander 5474 - 5482; 10 holes (.39)

Halliburton Water Frac Break 2700, Avg. HHP 2075, Avg. BPM 24.9, Avg. PSI 3400, 500 gals MOD 202 Acid, 45,700# 20/40 Sand, 649 BBL Fluid, ISIP 1800, 5 min 1650.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Top Soil Sand	0	40	<i>y</i> .
RR & Sand	40	875	Coal Seams; 875 - 882
Coal	875	882	Water 110
Sand, SH	882	2195	
Big Lime	2195	2265	
Sand, Shale	2265	5654	
See Attached Sheet			

(Attach separate sheets as necessary)

CNG Development Company
Well/Operator //
4 1 W / H/
By: Allubolar
Date: January 28, 1985
January 28, 1985

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including wall, encountered in the drilling of a well."

CNGD NO _____439

FARM NAME G.M. Thompson

API NO 47-033-3088

LOG TOPS		
B. LIME/B. INJ.	2192	2350
WEIR	2416	2520
GANTZ	2612	2650
50'	2715	2760
GORD. STR./GORD.	2824	2940
4TH	3000	3020
5TH/L,5TH	3148	3224
WARREN	3480	3520
U. SPEECH.	3683	3740
SPEECH	3812	3834
BALLTOWN	4044	4182
BRADFORD	4243	4486
RILEY	4905	5034
BENSON	5125	5145
LEOPOLD	5247	5292
CEDAR CREEK	5408	5530

TD 5654- alex. @ TD

FORM IV-2(B) (Obverse) 7-83 FILE COPY



1)	Date:	<u>September</u>	5	, 19_84
2)	Operator's Well No.	439		****
3)	API Well No	47	033	3088
		State	County	Permit

STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION

			, participal		<u>A</u>	PPLIC	ATION FOR A WEL	L WORK PERMI	<u>r</u>	the trade the same of the same
	WEITTY	PE: A C	oii X	/_G	D.C.	= ,				
٦,	WELLI		If "Gas",				/ Underground s	Silving its like	CRATTE BELL	
5)	LOCATIO	N. FL	evation: _	1258	"; —		Vinderground s	Coburn Fo	/ Deep	_/ Shallow/)
٠,	DODALAS		strict:	Tenm:	ile			rrison		Salem 7.5'
െ	WELL OF					Com		7) DESIGNATE		ary Nicholas
٠,	Addres	c/o Pa	ul W.	Garre	tt. P	.0. i	Box 15746	Address	Crosswind Cor	
	,		ittsbu			5244			Box 698, Brid	
8)	OIL & GA						· · · · · ·	9) DRILLING		
		lr. Ste			1				n Jack Drillir	ng Company
	Address		2, Bo		-D			Address	P. O. Box	
		Ja	ne Lew	, WV	2637	8	•		Buckhannor	
10)	PROPOSE	D WELL	WORK:	Drill	X	/ Dri	ll deeper	/ Redrill	/ Stimulate	ME CELLY EID
,			·· OALL		ff old		on/ Perform			CAR CAR
								ite ilew reinigile		
11)	GEOLOGI	ICAL TAR	GET FOR				kander			SEP 7 - 1984
•	12) Estima					5645	feet			
	13) Appro							<u>-</u>	feet.	OIL & GAS DIVISION
	14) Appro		: -	-		•••		l being mined in th	e area? Ves D	EPTNOF MINE
15)	CASING A		•							
	ASING OR	H	SPEC	IFICATION	S		FOOTAGE II	NTERVALS	I CEMENT FILL-UP	1 PACKERS
T	UBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	
Con	iductor	16		V	T		20-30	-	(Cubic ibet)	Kinds
Fres	sh water	11-3/	4 H-40	42	. х	 	40	40	To surface	By Rule 15.05
Ċoa	ı)				<u> </u>				TO SULLACE	Sizes
Inte	rmediate	8-5/8	X-42	23	X		1250	1250	To surface	By Rule 15.05
Pro	duction	4-1/2			X		5645	5645	200-400 sks	Depths set
Tub	ing	1-1/2			Х	1200	= "	3010	200 700 383	By Rule 15.01
Line			1 1		M 940.					Perforations:
-										Top Bottom
				****				1 14 / 1		
							OFFICE USE C	NLY		
							DRILLING PE	RMIT		
_		4	47-033-	-3088				•	October 26	,, 84
Peri	mit number_					 .	<u>.</u>		Dat	19
This	nermit cove	wine the m	all operato		loonele	h			Dat	
quir	rements subje	ect to the co	onditions of	ontained	herein a	ind on t	he reverse hereof. Na	i permission gran	co to orm in accordan	ice with the pertinent legal re- il and Gas Inspector, (Refer to
No	. 8) Prior to	the constru	iction of re	onds, loca	tions an	d pits fe	or any permitted work	In addition, the v	vell operator or his con	tractor shall notify the proper
dist	rict oil and g	as inspecto	r 24 hours	before a	ctual pe	rmitted	work has commenced	i.)		H 767 761
The	permitted w	ork is as de	escribed in	the Notic	e and A	pplicati	on, plat, and reclama	tion plan, subject	to any modifications a	nd conditions specified on the
	rse hereof.	0ct	tober 2	26, 19	86					
Peri	mit expires _			<u> </u>			uniess well	work is commence	d prior to that date and	prosecuted with due diligence.
	- 01					1.				
В	ond:28	Agen	t: F	Plat:	Casin	g	Fee	_		,
	BLANKET			-C	TY	7 0	203-		· ·	
L		11/	2 /	ر ر	10		772	VIIIn.	- 1 C)	1/
			·					1 1000	april J	Nasse_
NIO:	TC. V		****	!4 *	- 4	.111*		Adju	indistrator, Office of C	il and Gas
140	TE: Keep o	ne copy of	unis perm	it posted a	at the di	riting (c	CRIION.	. //	/	File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

IV-9 (Rev 8-81)



WELL NO. CNGD #439 (Rev.)
API NO. 047 - 033 -

(D)

Rocd. (WFSCD) SEP 21 1984

Sinte of Mest Nirginia Bepartment of Mines Gil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

1	COMPANY NAME CNG Development Comp			ENIGary A. Nicholas	
	Address 1 Park Ridge Ctr. Pitt	sburgh	p Address Rt	. 2. Box 698 Bridg	eport,
	Telephone 412-429-2390		Telephone	304-623-8842	رریء
	LANDOWNER Lester Thompson		SOIL CONS	DISTRICT West Fork	
	Revegetation to be carried out by (NG Devel	opment Co	Gary A. Nichola	igent)
	This plan has been reviewed by	We	st Fork	SCD. All correction	ns
	and additions become a part of this pl	an: /C	19184		
HIS HAN R SL	REVIEW IS MADE FOR SITE AS SHOWN. A IGE OF ELEVATION OF PLUS OR MINUS 10 FT. OPE OF PLUS OR MINUS 3 PERCENT MAKES PLAN NOT ACCEPTABLE TO WESCO.	De,	(SCD Age	E Dought IOCATION	
	Structure Cross Drain From 4% grade (every 1	(A)	Structure	Diversion Ditch	(1)
	From 4% grade (every 19 Spacing to 12% grade (every 72	50') ')	Material	Earthen	
	Spacing to 12% grade (every 72 with ripropped outle	d '		Manual 2-12	
	Page Ref. Manual 2_1 VV	-	rage Res.	Manuar 7-17	
	structure Culvert (15 min. I.D	(B)	Structure	None	(2)
	At natural drains Spacing According to 0 & G M	anual	Material		
	Spacing According to 0 & G M with ripropped ou Page Ref. Manual 2-7	Het -	Page Ref.	Manual	
	•	4.50			
	Structure Drainage Ditch On Upper Road Cuts,	- ^(C)	Structure	Rip Rap-	(2)
	Spacing According to 0 & G Ma		Material_	Stone or Timber	
	Page Ref. Manual 2_12	_	Page Ref.	Manual 2-9	
	All structures should be inspected commercial timber is to be cut and cut and removed from the site before Structure Sejument Bar Material Hay or Straw bules Sp. Ref. Man. 2-16 Treatment Area I	stacked and re dirt work	i all brush begins.	red if necessary. All and small timber to be Treatment Area II	
	LimeAs determined by pH Tons/ac	rre	Lime As A	etermined by pH Tons	t :/acre
	or correct to mo_5		or cor. Fertilize	rect to pH 6.5	
	Fertilizer 600 lbs/acc (10-20-20 or equivalent)	.e	rertitize.	r <u>600</u> lbs/ (10-20-20 or equivalent)	acre
	Mulch Hay or Straw 2 Tons/ac		Mulch Hay	or Straw 2 Tons	i/acre
	Seed* Kentucky 31 Fescue 3 lbs/ac	æ		hard Grass 10 lbs/	
	<u> Pirdsfoot Trefoil 10 lbs/acc</u>		Red	Clover 12 lbs/	
	<u>Domestic Rye</u> 101bs/acc	re	Als	ike Clover 4 lbs/	'acre
	*Inoculate all legumes such as veto Inoculate with 3X recommended amount.	ch, trefoil	and clover	s with the proper bacteri	um.
		FIAN PR	TPARED BY	LAND SURVEYING SERVI	CES
	NOTES: Please request lawfowners'		ADDRESS	(412 N. 18th Street	
	seedling for one growing season.			Clarksburg, WV 2630	3 1
	Attach separate sheets as necessary for comments.	<u> </u>		30/: 6231121/	
	i necessaria (OP (EDECETS)	j <u>w</u> 'i	TODAY AND 1	ann. あつえ. 1 ワナル	

COULSES.

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP.
QUADRANGLE Sale M. 7.5 Min.

CAGD ASA

CAGD ASA

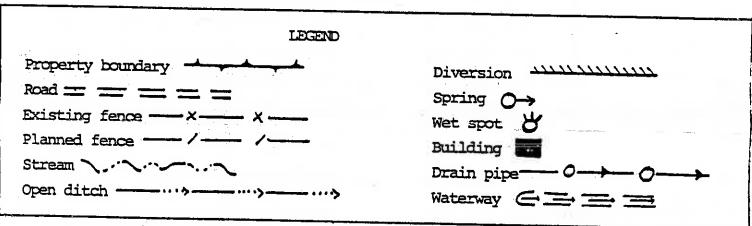
Generative of B. of Island

Generative of B. of Island

WELL SITE PLAN

WELL SITE PLAN

ketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.



CNGO THIS LOCATION IS ON A CLEARED NOSE ABOVE A HOLLOW KNOWN AS FALLEN TIMBER RUN. THE ACCESS ROUTE WILL ANGLE UP THROUGH THE WOODS AT VARYING GRADES TO SWITCH BACK AND ULTIMATELY MEET CO. RT 50% TIMBER WILL BE CUT AND STACKED AND TOPSOL WILL BE .25 MILE STOCKPILED FOR USE IN REVEGETATION. To RT. (29) (COBURN FORK ROAD) LIVESTOCK IS PRESENT ON PARTS OF Y THIS FARM. Natural vegetation (filter strip) will remain undisturbed in areas between construction a natural water

CNGD - PLAN TO DRILL

WELL NO: 439

FARM NAME:

G. M. Thompson

MAG. DIST./TWP. Tennmile

COUNTY:

Harrison

DIVISION:

Southern

STATE:

wv

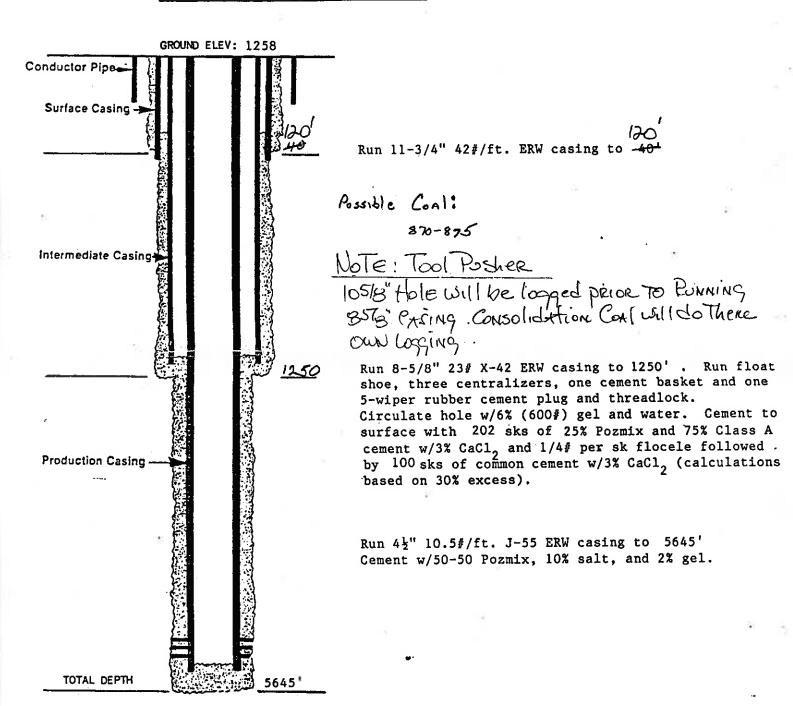
QUAD/MAP REFERENCE: Q117-1134

A. GENERAL INFORMATION

- 1. Coal Owner:
- 2. Sample Interval:

None

B. CASING AND CEMENTING PROGRAM



C. LOGGING PROGRAM Run Gamma Ray, 2" and 5" full hole. Run Compensated Density, Caliper, Induction, Temperature, 5" Scale - Casing to TD.

D. MISCELLANEOUS COMMENTS

MUD LOGGER

Possible completions: Alexander, Elk, Benson Depleted zones: Gordon, Big Injun, Salt Sand

CEMENT COMPAN	VY HAL	LiBurton	
WATER NEEDED	11 - 3/4 "	BBLS	WN 439
=	8-5/8"_	570 ERLA	Thompson DLL 9/12/84
	4-1/2"	570 E	
LOGGING COMP	ANY		

Potential Product	ive rormations:	
L. 5th Sand		
U. Spehly		
Spehly		
Balltown /	unlikely productive	
Bradford		
Rilly		
Benson	= -	
EIK		
Alexander		
	- E	The state of the s
	-	
	#/	
Depleted Zones:		
Salt Sand	<i>(</i> -2)	
	위 전	
Big Mun		
Big Injun Gordon		
Gordon Gordon		
Gordon Gordon		

Remarks; Minimum Gas Sat'n for completion - 502

2. Matrix Grain Density = 2.71 Above Base of Big Injun
2.68 Below Base of Big Injun
3. Rock Pressures in area = F-16730 - 1700 = 1

3. Rock Pressures in Orch: F-65730 - 1700 EIK 1
F-70482 - 1650 /44 - Alex
F-72988 - 1900 / 14 ho Alex

ALL ZONES EXHIBITING POTENTIAL WHICH ARE NOT ON THE DEPLETED LIST SHOULD BE COVERED WITH CEMENT AND SEPARATED BY BAFFLES.