





Division of the Lay

State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas API # 47- 85--07501 k 85 7581 F

Cement

52

55

Fill Up

Left

Drilling | in Well|Cu. Ft.

322

2013

1600

Permitting Oil and Gas Section

Well Operator's Report of Well Work

Farm name: HANLON, DAVID G.

Operator Well No.: MASON 2

LOCATION:

Elevation: 910.00

Quadrangle: CAIRO

District: GRANT

1680

County: RITCHIE Feet South of 39 Deg. 10Min. 0 Sec. Feet West of 81 Deg. 12 Min. 30 Sec.

330'

2024

0

Longitude 8880

Casing | Used in

Tubing |

711

41/2

1½

Size

Company: GLENEAYRE RESOURCES, INC.

Latitude:

P. O. BOX 183

RENO, OH 45773-0000

Agent: DAVID HANLON

Inspector: SAMUEL HERSMAN Permit Issued:

07/12/89 Well work Commenced: 6-30-89 Well work Completed: 9-25-89

Verbal Plugging

Permission granted on: Rotary X Cable Rig
Total Depth (feet) 2020
Fresh water depths (ft) 80

Salt water depths (ft)

Is coal being mined in area (Y/N)?N Coal Depths (ft): 1107-1109,1313-1315,

1386-1388,1408-1411,

OPEN FLOW DATA

Producing formation	Big Injun	Pay zone depth	(ft) 1820
Gas: Initial open flow	45 MCF/d Oil:	Initial onen flow	D
rinal open flow	2/4 MCF/d	Final open flow	0   Bbl/d
Time of open flow	between initial a	and final tests	48 Hours
Static rock Pressure	<u> 155                                   </u>	ace pressure) after	48 Hours

Second producing formation Second producing formation Maxon Pay zone depth (ft Gas: Initial open flow 10 MCF/d Oil: Initial open flow 2 Pay zone depth (ft) 1683 MCF/d Oil: Initial open flow 1

MCF/d Final open flow 1 Bb1/d Final open flow 2 Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 200 psig (surface pressure) after \_

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: GLENEAYRE RESOURCES, INC.	 		
By: 1 hm ) ( ) ch-	Thomas	G .	Dalman
Date: 11 05 00	 THOmas	<u> </u>	<u>rali</u> ner

Date: 11-07-89

(OVER)

- 1. Set 4½" alpha bridge plug @ 1715.
- 2. Dumped 6 gallons of Class "A" cement on bridge plug.
- 3. Perforated 4½" casing into Maxon Sandstone. 1673-1683 6 shots
- 1588-1596 6 shots .39 shots - 3-1/8" Hollow Steel Carriers
- 4. Acidized formation with 500 gallons of FE acid.
  Breakdown 2540 psig
  ISIP 820 psig
  5-min shut in 400 psig
- 5. Fracture treatment of Maxon Sandstone.
  1100 bbls gelled water and 21,000# 20/40 mesh sand.
  Breakdown 2600 psig
  ISIP 1420
  5-min shut in 1200
  Average Rate 11 bpm

\*NOTE: No new logs were run except Gamma-Ray correlation strip for perforation depth control.

RECEIVED

Division of Energy

Oil and Good Colors

Oil and Colors

Oil and

(1/3/2)

### +

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

#### Well Operator's Report of Well Work

Operator Well No.: MASON 2 HANLON, DAVID G. Elevation: 910.00 Quadrangle: CAIRO . LOCATION: County: RITCHIE District: GRANT 1680 Feet South of 39 Des. 10Min. 0 Sec. Latitude: 8880 Feet West of 81 Des. 12 Min. 30 Sec. Longitude Company: GLENEAYRE RESOURCES, INC. | Casins | Used in | Left P. O. BOX 183 IFill Upl l RENO, OH | Tubins | Drillins | in Well|Cu. Ft. | Asent: DAVID HANLON Inspector: SAMUEL HERSMAN 1 330 1 332 1 52 10/28/88 Permit Issued: Well work Commenced: \_10-19-88\_\_\_\_ Well work Completed: \_10-28-88\_\_\_\_ 55 I 2013 1 4-1/2" 1 2024 Verbal Plussins Permission sranted on:\_\_\_\_\_ Rotary\_X\_\_ Cable \_\_\_\_ Ris 2-3/8" 1 0 1 1723.941 Total Derth (feet) \_\_2020\_\_\_\_\_ Fresh water depths (ft) \_\_80\_\_\_\_ Salt water depths (ft) \_\_\_\_\_\_ Is coal being mined in area (Y/N)?NCoal Derths (ft):\_1107-09,1313-15,\_\_\_ | 1318-20,1332-34,1336-88,1408-11, DIVISION OF OIL & GAS 1413-15 DEPARTMENT OF ENERGY OPEN FLOW DATA Producing formation\_Greenbrier Lime \_\_\_\_\_Pay zone depth (ft) 1740-50 Gas: Initial open flow 10 MCF/d Oil: Initial open flow 0 Rb1/d Final open flow\_\_\_\_5\_MCF/d Final open flow \_\_\_\_0\_\_Bb1/d Time of open flow between initial and final tests\_\_\_\_24\_\_Hours Static rock Pressure\_\_450\_\_psis (surface pressure) after  $_{-48}$ \_Hours Second producing formation\_\_\_\_\_ Pay zone depth (ft)\_\_\_\_\_ Gas: Initial open flow\_\_\_\_\_\_Bbl/d Final open flow\_\_\_\_\_\_Rbl/d Time of open flow between initial and final tests\_\_\_\_\_Hours Static rock Pressure\_\_\_\_\_Psid (surface pressure) after \_\_\_\_Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: GLENEAYRE RESOURCES, INC.

MAR 3 1 1989

Date: 3-21-89

Perforating:

Greenbrier Lime 1740-50

20 shots

Hollow Steel Carriers

Frac:

Nowsco

40 Tons CO<sub>2</sub> pumped @ 7.5 bb1/min 277,500 scf  $N_2$  pumped @ 5,000 scf/min

Breakdown @ 2040

ISIP @ 2000

5 minute shut-in @ 1600

\*NOTE: Bridge plug set @ 1810'



**DIVISION OF OIL & GAS** DEPARTMENT OF ENERGY



WR-35

# OCT 09 1987

#### DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

## State of Mest Virginia

DEPARTMENT OF ENERGY
Oil and Was Division

	tober 6, 19	87						
operator's								
Well No.	#2							
Farm	MASON	•						
API No.	47 - 085	- 7581						

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WEIL TYPE: $0il x / Gas x / Liquid Injection$ (If "Gas," Production / Undergrou	/ Wast	e Disposa ge/ Deep	1/ p/ Sha	110w_X_/)
LOCATION: Elevation: 910' Watershed	North Fork	. Hughes Ri	ver	
District: Grant County Rite	hie	Quadrangle	e Cairo 7	7.5'
COLONIA MOVACED OIL & CAS CORDONATION		***************************************		
COMPANY VOYAGER OIL & GAS CORPORATION		·		
ADDRESS P.O.Box 183, Reno, OH 45773	Casing	Used in	Left	Cement fill up
DESIGNATED AGENT David G. Hanlon ADDRESS 108 E.Main St., Harrisville, WV 26362	Tubing	Drilling	in Well	Cu. ft.
	Size			
SURFACE OWNER David G. Hanlon  ADDRESS 108 E. Main St., Harrisville, WV 26362	20-16 Cond.			
	13-10"			
MINERAL RIGHTS OWNER David G. Hanlon	9 5/8			
ADDRESS 108 E. Main St., Harrisville, WV 26362	8 5/8			
OIL AND GAS INSPECTOR FOR THIS WORK Samuel	7	330'	322'	52 cu ft
Hersman ADDRESS P. O. Box 66 Smithville, WV 26178	5 1/2			
PERMIT ISSUED 12/17/86	4 1/2	2024'	2013'	55 cu ft
DRILLING COMMENCED 1/17/87	3			33 64 16
DRILLING COMPLETED 1/20/87	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PENNISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION BARRA Big Inju	n	Dept	h 1820	£
Depth of completed well 2013 feet R				
Water strata depth: Fresh 80 feet;	Salt 130	/ Cable	10015	
Coal seam depths: NA			od in Ab-	N -
	15 COAT	remd limit	a in the	area? No
OPEN FLOW DATA				
Producing formation Big Injun	Pay	zone dept	_h 1820	feet
Gas: Initial open flow 45 Mcf/d	Oil: Ini	tial open	flow	Bb1/d
Final open flow 2 Mcf/d	Fin	al open fl	low	Bbl/d
Time of open flow between initi	al and fi	nal tėsts	48 ho	urs
Static rock pressure 155 psig(surface	measuren	ent) after	48 hou	rs shut in
(If applicable due to multiple completion-				
Second producing formation	Pay	zone dept	.h	feet
Gas: Initial open flow Mcf/d	Oil: Ini	tial open	flow	Bb1/d
Final open flow Mcf/d	Oil: Fir	al open fi	liow	Bbl/d
Time of open flow between initi	al and fi	nal tests	ho	urs
Static rock pressurepsig(surface	measurement	ent) after	hou	rs shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANCE, ETC.

PERFS:

1846' - 1856' w/20, .39" holes

FRAC:

368 sx 20/40 sand

451 вы н<sub>2</sub>0

BREAK:

2150 psig

AVG. PRESSURE: 1850 psig

AVG. RATE:

8 BPM

ISIP:

1510 psig

#### WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET		REMARKS	
	TOP PEET	BOTTOM FEET	Including indication and salt water, co.	on of all fresh
(Surface to 982' not logged) Shale, Siltstone, Coal First Salt Sand Siltstone, Shale Second Salt Sand Siltstone, Shale, Coal Third Salt Sand Siltstone, Shale Maxton Sandstone Greenbrier Limestone Greenbrier Sandstone Shale Big Injun Sandstone Siltstone, Shale	982 1156 1232 1271 1407 1518 1608 1629 1702 1804 1814 1823 1904	1156 1232 1271 1407 1518 1608 1629 1702 1804 1814 1823 1904 T. D.	Show gas @ 1184'  No shows  Broken, good show of oil @ 1590'  Slight show of gas Good show oil & gas No shows  Show gas @ 1850'  Driller's T. D. 20	Coals:  1107' - 1109' 1313' - 1315' 1318' - 1320' 1332' - 1388' 1408' - 1411' 1413' - 1415'

(Attach separate sheets as necessary)

Well Operator		CORPORATION Hudson	1
Ву:		لاسلما	سالماء
Date:	6 <del>/15/</del> 87	10/06/87	

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 only encountered in the drilling of a well."

FORM WW-2B					Page	<u> </u>
	<b>りたり タ む む</b> か		OF WEST V	<u>/IRGINIA</u> [SION OF OII	AND GAS	
	•					04-
l) Well Ope:	rator:	۵ر Gleneayı	osî re Resourc	es, Inc.	19280, 2,	d 15
2) Operator	's Well N	Number:	Maso	n #2	3) Ele	vation: <u>910</u>
4) Well typ	e: (a) (	oil_ <u>X</u> /	or Gas	<u>X</u> /		
•	(b) 1	[f Gas: F	roduction Deep	X_/ Undergr	ound Storage Shallow	<u></u> /
5) Proposed	Target I	Formation(	(s): <u>Big</u>	Injun 37		
6) Proposed	Total De	epth: 20	Ó 0	_ feet		
7) Approxim	ate fres	h water st	rata dept	hs:80'		
8) Approxim	ate salt	water de	oths:	1300'		
9) Approxim	ate coal	seam dep	ths: N	/A		
10) Does lan	d contai	n coal sea	ams tribut	ary to acti	ve mine? Ye	s/ No_X
11) Proposed	Well Wo	rk: St	imulate E	xisting Well		
12)	ŧ				1	
		CASIN	G AND TUBI	NG PROGRAM		
TYPE	<u> </u>	PECIFICAT	IONS	FOOTAGE IN	ITERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	7"		17#	330'	3221	52
Fresh Water					X	MO
Coal					1,00	
Intermediate			·		41	
Production	4½"		9.5#	2024	2013'	5.5
Tubing						
Liners					DEC	TIVISIN
PACKERS : Ki	nd None	е			MACT	2 4 1988
Si	zes pths set				Caller UUI	
1260	pens set				DIVISION	OF OIL & GAS

Fee(s) parid: (

Well Work Permit

Reclamation Fund

WPCP

		DECE	VEM					٨
Form	1 of <u>x 2</u> ww2-A	OCT 24	1988	1) 2)		tober 7, 1988 's well number		
(09/8)	37)				Masor	ı #2		
	Copy	DIVISION OF DEPARTMENT	oil & gas of energy	3)	API Well	No: 47 - 085	- <u>75</u>	81 -FRAC
						Bone #B-0043	711_087_0	c
		DEPARTMENT	STATE OF VOICE OF ENERGY			OIL AND GAS	74-007-0	О
		NOTICE AND	APPLICATIO	ON FC	OR A WELL	WORK PERMIT		
4)	Surface O	wner(s) to	be served:		5) (a) Co	al Operator:		
- ,	(a) Name	David G.	Hanlon			N/A		
	Address _	108 E. Ma	in Street		Address	N/A		
		Harrisvil	le, WV 263	362				,
	(b) Name				(b) Coal	Owner(s) with	Declara	tion
	Address			<del></del>				
-					Address			
	(c) Name				-			
	Address			<del></del>	Name			
					Address			
6).	Inspector	Sam Hers	man	· .	(c) Coal	Lessee with D	eclarati	on
	Address _	Rt. 1, B	ox 240		Name			
		Harrisvi	lle, WV 263	362	Address			
	Telephone	(304)62	8-3185					
		TO THE PERS	ON(S) NAMEI	D ABC	VE TAKE N	NOTICE THAT:		
X Sect:	racts by w Included ion 8(d) o I certify we served mpanying d Pers Cert	hich I hold is the info f the Code that as re copies of tocuments parts on al Service	the right rmation red of West Vir quired unde his notice ges 1 throw (Postmarked	to equirerginier Chandugh _ it at d pos	extract of deap control of the contr	B of the West on, a location a location above named on the location of the loc	cle 1, Virginia n plat,	and
familattad respo	ne terms a I certify liar with chments, a possible fo tue, accur I am awar	nd conditio under pena the informa nd that bas r obtaining ate, and coe that ther	ns of any party of law tion submited on my in the informablete.  e are significations.	permi that tted nquir matio ifica	t issued I have pon this a y of thos on, I beli	88 CSR 11-18, under this appersonally examplication for se individuals leve that the	plicatiomined an mand a immedia informat	n. d am ll tely ion
infor	mation, i	ncluding th	e possibil: Well Operat	ity	f fine ar	nd imprisonmen Yre Resources,	<del>د</del>	
	•		By:	<u> </u>	<u> </u>		) a (	
			Its:			almer, Preside	nt	
			Address		0. Box 10			<del></del>
					10, OH 45			
01			Telephone _	(6]	L4) 373-83	385	•	
Subsc	cribed and	sworn befo	re me this	7_	_day of _	October		19 <u>88</u>
					Lila E	2/10		
					o ever b		Notary P	uD11C

1991

My commission expires





<i>-</i> ,	***************************************	CANA		Carre	****	Dermit
	Well No.	47 —	085	-	7581	
2) Oper Well	No.	MASON				
1) Date	:I	ecemb)	er (	4,	, 19	86

BLANKET BOND

# DIVISION OF OIL & GAS STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

#B-004374-087-86

				AP	PLICATI	JN FUR A WELL	WORK I ERMII		
<ul><li>4) WELL TYP</li><li>5) LOCATION</li><li>6) WELL OPE Address</li></ul>	B (If i: Elev Dist	"Gas", P vation: rict: VOYAGE P. O.	Grant	X 0' 7\\ & GA 3		County: R	norage North Fork itchie <i>OBC</i> DESIGNATED Address	AGENT DAVID	Cairo 7.5' 27 G. HANLON ain Street
8) OIL & GAS Name Address	Samu P.	el Her	sman		178		Name Fo	NTRACTOR: uts Operation Route 2, Bo Glouster, C	ож 271 ЭН 45732
(0) PROPOSEI	D WELL V	WORK:	-	old for	/ Drill ormation_ change in erea	deeper/ Perfora	/ Redrillte new formation	/ Stimulate/	X
12) Estima 13) Approx 14) Approx 15) CASING A	ted depth o kimate trat kimate coa	of complete a depths: I seam dep	ed well, Fresh, ths:	N/A	2400 50	feet; salt,	1150	feet. area? Yes	/ NoX
CASING A  CASING OR  TUBING TYPE	Size		SFICATIONS Weight per ft.	New	Used	FOOTAGE IN	TERVALS	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor Fresh water Coal	7"			Х		3201	3001	To surface	Kinds by rule 15.05 Sizes
Intermediate Production Tubing	4.5"		9.5#	X		2400	24001	As per rule	Depths set 15.01 0/240
Liners									Perforations: Top Bottom
						OFFICE USE (			
Permit number_		<u>47-085</u>	5-7581			DRILLING PE	KMI I	Decemb Dai	er 17 19
This permit cove	ering the w	ell operat	or and well	ll locati herein	on shown and on the	below is evidence reverse hereof No	of permission gran	ed to drill in accordar	and Gas Inspector, (Refer

No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof. unless well work is commenced prior to that date and prosecuted with due diligence.

Permit expires	ресе	ember 17	1900				_		-
Bond:	Agent:	. H.:	Casing	Fee 1242 1242	WPCF V	思	Other		
NOTE: Keep	one copy of this	permit poste	d at the drilling	g location.	Dire	ctor, bi	ivision	of Oil and Gas	File