



Minimum Error of Closure ONE PART IN 300

Source of Elevation U.S.G.S. B.M. AT POINT PLEASANT CHURCH & BY OLD SCHOOL HOUSE, ELEVATION = 1030

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: mark c. eckard

Map No. _____

Squares: N S E W

Company PALEO, INC.
 Address SUITE 205-MAY-EX-BLDG 3022 N.W. EXPRESSWAY OKLAHOMA CITY, OKLAHOMA 73112
 Farm GEORGE ADRIAN JOHN G. WOOFER LEASE
 Tract _____ Acres 80 Lease No. _____
 Well (Farm) No. I-629 Serial No. _____
 Elevation (Spirit Level) 1042
 Quadrangle VADIS 7.5, 15' WC
 County DODDRIDGE District COVE
 Surveyor MARK C. ECKARD
 Surveyor's Registration No. 490
 File No. _____ Drawing No. _____
 Date DECEMBER 4, 1978 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. 47-017-2473

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

AUG 24 1979

- Denotes one inch spaces on border line of original tracing.

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

Date October 22, 19 79

FORM IV-35
(Reverse)

Operator's
Well No. Woofter #I-629

[08-78]

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47 - 017 - 2473
State County Permit

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 1042' Watershed: Fallen Timber Run
District: Cove County: Doddridge Quadrangle: Vadis

WELL OPERATOR Paleo, Inc. DESIGNATED AGENT Terry Bonnett
Address: Suite 207, May-Ex Building Address Troy, WV
3022 N.W. Expressway
Oklahoma City, OK 73112

PERMITTED WORK: Drill X / Convert ___ / Drill deeper ___ / Redrill ___ / Fracture or stimulate ___
Plug off old formation ___ / Perforate new formation ___
Other physical change in well (specify) _____

PERMIT ISSUED ON August 20, 19 79 OIL & GAS INSPECTOR FOR THIS WORK:

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED
Name Paul Garrett
Address Clarksburg, WV
622-3871

GEOLOGICAL TARGET FORMATION: Big Injun Depth 2119 feet

Depth of completed well, 2224 feet Rotary X / Cable Tools ___

Water strata depth: Fresh, 81 feet; salt, ___ feet.

Coal seam depths: None Is coal being mined in the area? NO

Work was commenced September 29, 19 79, and completed October 2, 19 79

GRADING AND TUBING PROGRAM

GRADING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	8 5/8					283	283		
Coal									Sizes
Intermediate									
Production	4 1/2						2147	125 sks	Deaths set
Tubing									
Linings									Perforations:
									Top Bottom

RECEIVED
NOV 29 1979

OPEN FLOW DATA

Producing formation Big Injun OIL & GAS DIVISION DEPT. OF MINES Depth 2119 feet

Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, 920 Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, 4 hours

Static rock pressure, 700 psig (surface measurement) after 48 hours shut in

[If applicable due to multiple completion--]

Second producing formation ___ Pay zone depth ___ feet

Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, ___ Mcf/d Final open flow, ___ Bbl/d

Time of open flow between initial and final tests, ___ hours

Static rock pressure, ___ psig (surface measurement) after ___ hours shut in

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

Fractured October 23, 1979

Big Injun - 3000 lb. breakdown
540 bbls water
injection rate 24.7 BPM at 1925 lb.
40,000 lb. 20/40 sand

Perforations - 2103 - 2119, 9 holes

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Surface			0	81	
Sand			81	84	Water
Shale			84	144	
Red Rock			144	350	
Sandy Shale			350	380	
Sand			380	450	
Shale			450	550	
Sand			550	570	
Shale			570	610	
Sand			610	660	
Shale			660	710	
Sand			710	750	
Shale			750	1100	
Sand			1100	1130	
Sandy Shale			1130	1400	
Sand			1400	1450	
Shale			1450	1575	
Sand			1575	1625	
Shale			1625	1770	
Sand			1770	1824	
Shale			1824	1955	
Lime			1955	1975	
Sand			1975	2004	
Lime <i>BL</i>			2004	2100	
Sand			2100	2130	Show of gas
Lime <i>BL</i>			2130	2160	
Shale <i>Pocouu</i>			2160	2224	
Total Depth			2224		

(Attach separate sheets to complete as necessary)

Paleo, Inc.
Well Operator

By Mark R. Worl
Its Agent

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 coal, encountered in the drilling of a well."

[08-78]

COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Woofter #I-629

API Well No. 47 - 017 - 2473
State County Permit

WELL TYPE: Oil / Gas /
(If "Gas", Production / Underground storage / Deep / Shallow)

LOCATION: Elevation: 1042' Watershed: Fallen Timber Run
District: Cove County: Doddridge Quadrangle: Vadis 7.5

WELL OPERATOR Paleo, Inc.
Address 3022 N.W. Expressway
Oklahoma City, OK 73112

DESIGNATED AGENT Terry Bonnett
Address Troy, WV

OIL & GAS ROYALTY OWNER John Woofter
Address Weston, WV

COAL OPERATOR _____
Address _____

ACREAGE 80
SURFACE OWNER George Adrian
Address Troy, WV
ACREAGE 80

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____
Name _____
Address _____

FIELD SALE (IF MADE) TO:
Name _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address Clarksburg, WV
622-3871

OIL & GAS DIVISION
DEPT. OF MINES

AUG 20 1979

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease / other contract / dated July 2, 19 69, to the undersigned well operator from John C. Woofter, et al to Consolidated Gas Supply Corporation of said deed, lease, or other contract has been recorded:]

Recorded on _____, 19____, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 94 at page 367. A permit is requested as follows:

PROPOSED WORK: Drill / Drill deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

---planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any action they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL PHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
5 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOUND

Paleo, Inc.
Well Operator
By David Summers
Its PRESIDENT

YY903

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION.

DRILLING CONTRACTOR (IF KNOWN) Fox Drilling, Inc.
Address Glennville, WV 26351

GEOLOGICAL TARGET FORMATION, Big Injun

Estimated depth of completed well, 2325 feet Rotary X / Cable tools /
Approximate water strata depths: Fresh, 120 feet; salt, feet,
Approximate coal seam depths: Is coal being mined in the area? Yes / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kinds
Fresh water	8 5/8					300'	300'	To surface
Coal								Sizes
Intermediate								
Production	4 1/2						2325	100 sks
Tubing								Depths set
Liners								Perforations:
								Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 4-20-80.

The following ~~operator~~ must be completed by the coal operator and by any coal owner or lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location, has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: , 19

By
Its