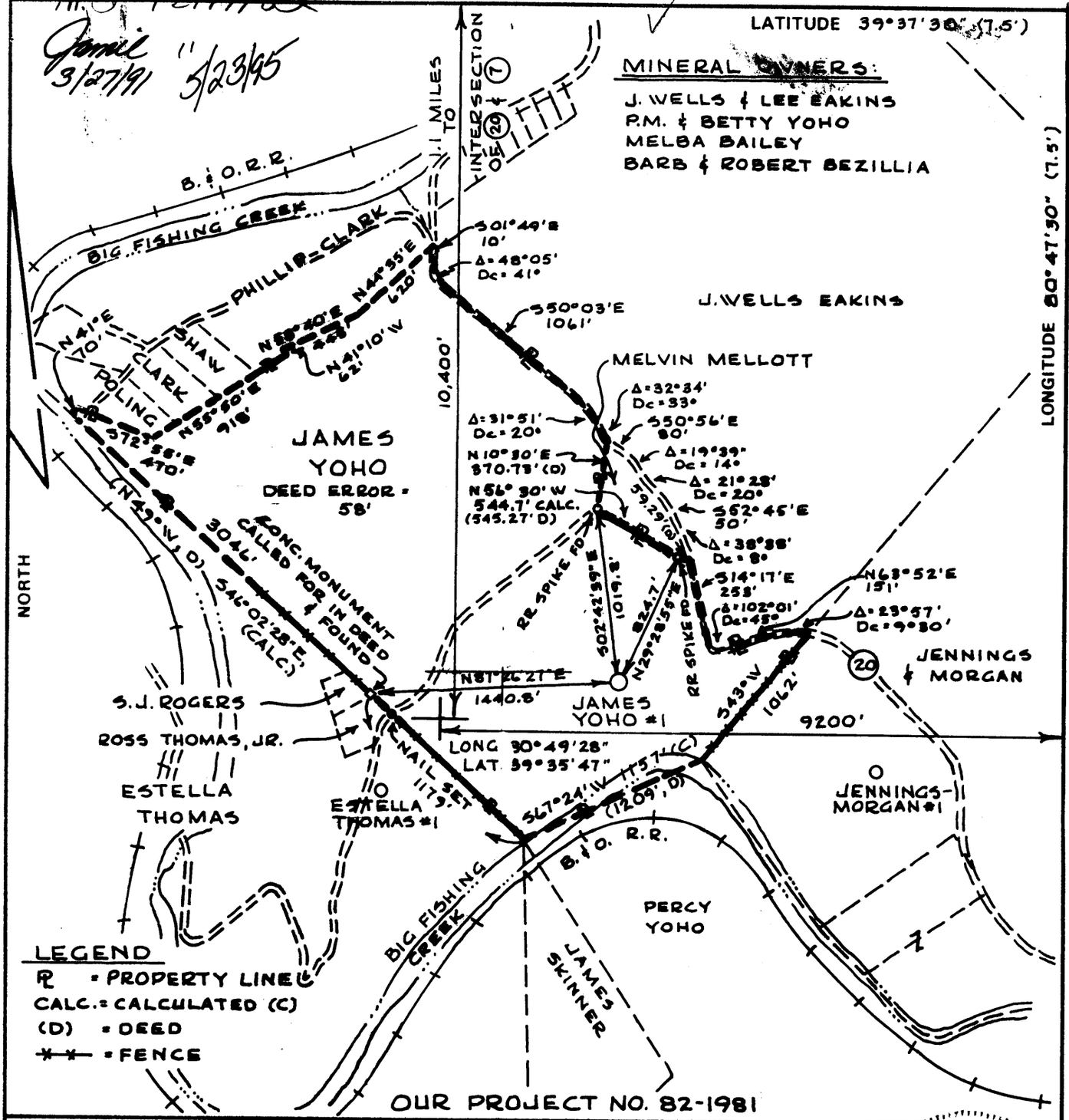
Jamie 3/27/91 "5/23/95



LEGEND

PL = PROPERTY LINE
CALC. = CALCULATED (C)
(D) = DEED
-x-x- = FENCE

OUR PROJECT NO. 82-1981

FILE NO.
DRAWING NO.
SCALE 1" = 800'
MINIMUM DEGREE OF ACCURACY 1:2500
PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. A139 EL. 644.487

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) Victor G. Vernon

R.P.E. _____ L.L.S. #550

PLACE SEAL HERE

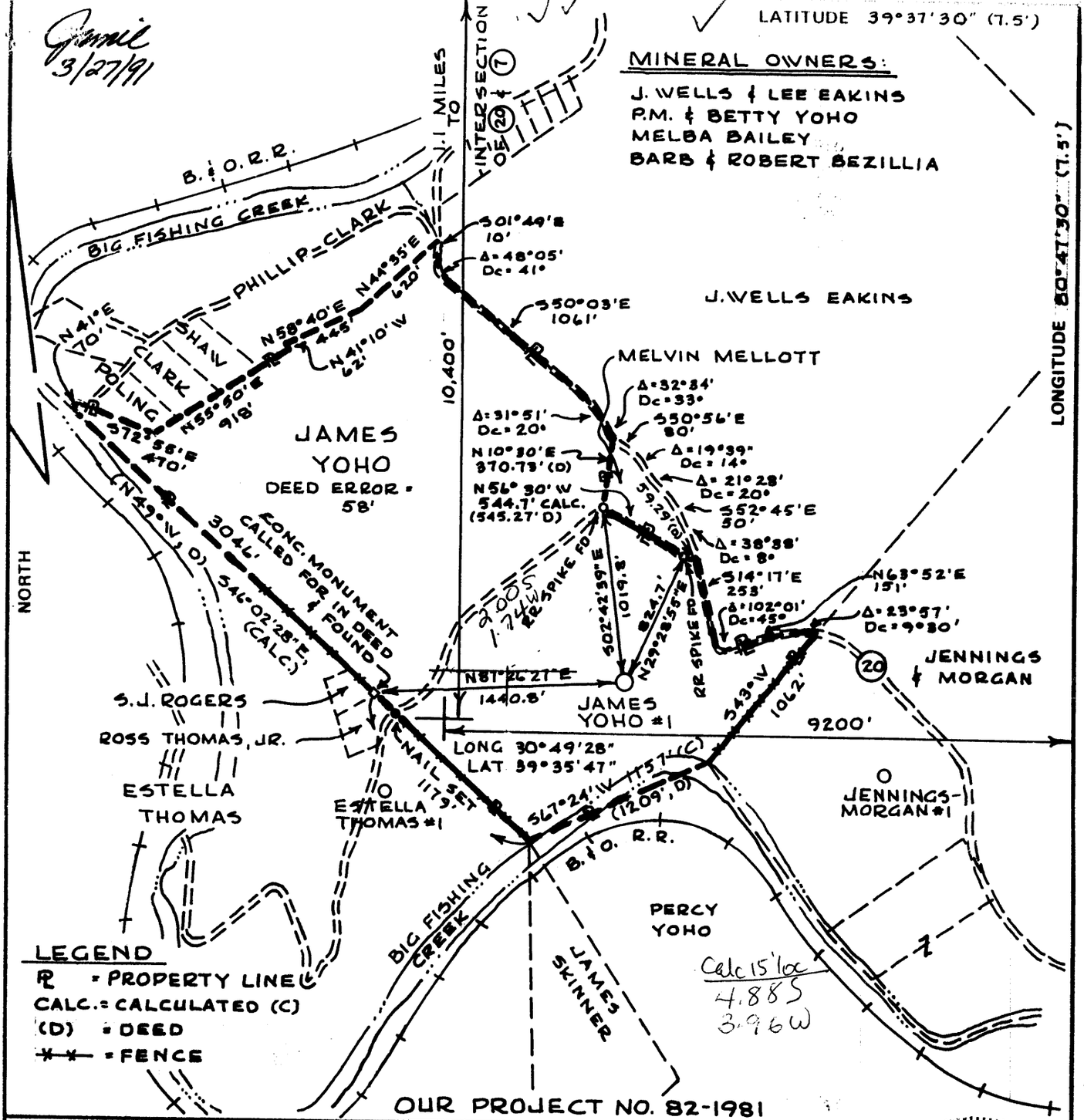
STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE DEC. 2, 1982
OPERATOR'S WELL NO. JAMES YOHO #1
API WELL NO. 47 - 103 - 1275 P
STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WELL TYPE: OIL X GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 848.9 WATER SHED FISHING CREEK
DISTRICT GREEN COUNTY WETZEL
QUADRANGLE PORTERS FALLS
SURFACE OWNER JAMES YOHO Box 665, New Martinsville, WV 26155 ACREAGE 135.25
OIL & GAS ROYALTY OWNER SEE ABOVE RIGHT LEASE ACREAGE 135.25
LEASE NO. ___
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 9/9/1991 this well was permanently plugged back to 1750'
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION GORDON SHALE ESTIMATED DEPTH 4100'
WELL OPERATOR Pioneer Gas Co. DESIGNATED AGENT WILLIAM CARPENTER
ADDRESS P.O. Box 4119 ADDRESS P.O. Box 4119
Parkersburg, WV 26104 Parkersburg, WV 26104

WETZEL Co. Rd 13

Gamil 3/27/91



FILE NO.
DRAWING NO.
SCALE 1" = 800'
MINIMUM DEGREE OF ACCURACY 1:2500
PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. A139 EL. 644.687

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) Earl G. Vernon

R.P.E. _____ L.L.S. #550

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

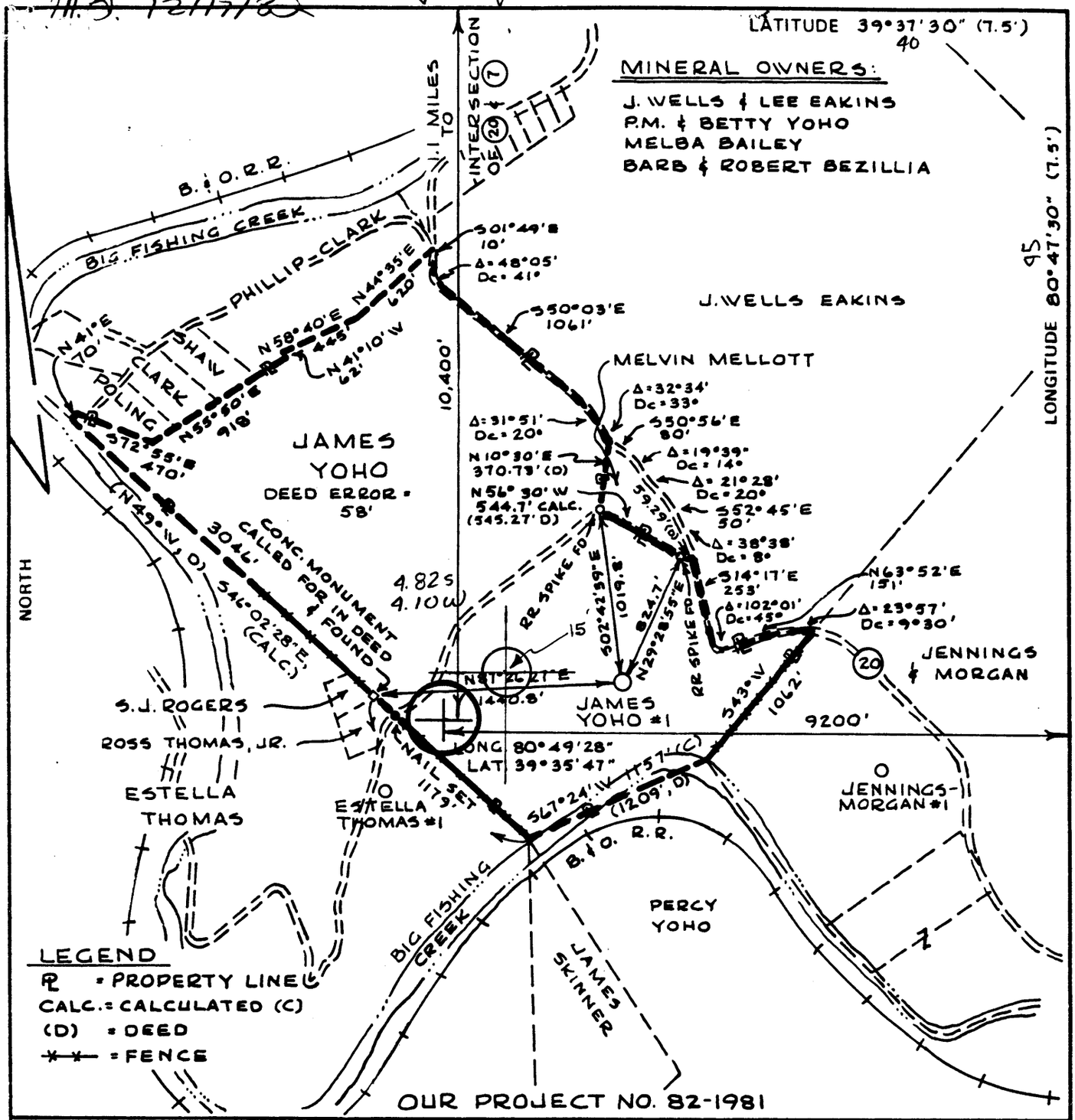
DATE DEC. 2, 1982
OPERATOR'S WELL NO. JAMES YOHO #1
API WELL NO. 47 — 103 — 1275 Frac.
STATE — WETZEL COUNTY — PERMIT
Temp. Flowback

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WELL TYPE: OIL X GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 848.9 WATER SHED FISHING CREEK
DISTRICT GREEN 5 COUNTY WETZEL
QUADRANGLE PORTERS FALLS New Martinsville SE
SURFACE OWNER JAMES YOHO Box 665, New Martinsville, WV 26155 ACREAGE 135.25
OIL & GAS ROYALTY OWNER SEE ABOVE RIGHT LEASE ACREAGE 135.25
LEASE NO. ___
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION GORDON SHALE, FIFTH SANDY ESTIMATED DEPTH 4100'
WELL OPERATOR PARDEE GAS CO. DESIGNATED AGENT WILLIAM CARPENTER
ADDRESS P.O. Box 4119 4568 ADDRESS P.O. Box 4119
PARKERSBURG WV 26104 PARKERSBURG, WV 26104

MAR 29 1991

H. T. HALL — FORM IV-6 (8-78) OWWO - 4-4 Porters Falls SPD - coal

WETZEL - 1275



OUR PROJECT NO. 82-1981

FILE NO.
DRAWING NO
SCALE 1" = 800'
MINIMUM DEGREE OF ACCURACY 1:2500
PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. A139 EL. 644.687

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) _____

R.P.E. _____ L.L.S. #582

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE DEC. 2, 1982
OPERATOR'S WELL NO. JAMES YOHO #1
API WELL NO.
47 - 103 - 1275
STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WELL TYPE: OIL X GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 848.9 WATER SHED FISHING CREEK
DISTRICT GREEN COUNTY WETZEL
QUADRANGLE ~~PORTERS FALLS~~ New Martinsville, W. Va. 15' EC
SURFACE OWNER JAMES YOHO Box 615, New Martinsville, WV 26155 ACREAGE 135.25
OIL & GAS ROYALTY OWNER SEE ABOVE RIGHT LEASE ACREAGE 135.25
LEASE NO. _____
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___

DEC 27 1982
2-2, Porters Falls (33)

TARGET FORMATION GORDON SHALE ESTIMATED DEPTH 4100'
WELL OPERATOR ~~LEGAND PETROLEUM~~ Coastal Corporation DESIGNATED AGENT WILLIAM CARPENTER
ADDRESS ~~3101 McKINNEY AVE. 3501 EMERSON AVE., SUITE 4B~~ PRODUCTION INC. ADDRESS 3501 EMERSON AVE., SUITE 4B
~~DALLAS, TX 75207~~ Parkersburg, WV PARKERSBURG, WV

WR-35

RECEIVED
MAY 31 1991
DEPT. OF ENERGY

28-Mar-91
API # 47-103-01275 F

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

Well Operator's Report of Well Work

Farm name: YOHO JAMES Operator Well No.: LELEND/YOHO 1

LOCATION: Elevation: 848.90 Quadrangle: PORTERS FALLS

District: GREEN County: WETZEL
Latitude: 10400 Feet South of 39 Deg. 37Min. 30 Sec.
Longitude 9200 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: PARDEE GAS COMPANY
4001 COLLEGE PKY. P.O. BX 4119

PARKERSBURG, WV 26104-4119

Agent: LINDA CARPENTER

Inspector: DONALD ELLIS
Permit Issued: 03/29/91
Well work Commenced: 5/16/91
Well work Completed: 5/20/91
Verbal Plugging
Permission granted on: Refrac
Rotary ____ Cable ____ Rig
Total Depth (feet) 1636'
Fresh water depths (ft) N/A
Salt water depths (ft) N/A
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 1634-36, 1624-26, 1595-1600, 1514-18, 1400-04, 1352-58

Casing & Tubing	Used in Drilling	Left in Well	Fill Up Cu. Ft.
Size			
Same			
Same			

OPEN FLOW DATA

Producing formation Coal Pay zone depth (ft) ____
Gas: Initial open flow 5 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow ____ MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 1125 psig (surface pressure) after 72 Hours

Second producing formation ____ Pay zone depth (ft) ____
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 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: PARDEE GAS COMPANY
By: Operations Manager
Date: 5/29/91

MAY 31 1991

Lelend/Yoho #1

1st stage 5/16/91

70 Q Foam Frac - Coal Formation

Shot 10 .34 holes from 1514 to 1636 and broke down with 28% HCL acid at a pressure of 1500 lbs. Ran 50 sacks of 20/40 mesh sand at an average rate of 25 BPM and an average pressure of 3774 lbs. A total of 295,000 SCF of Nitrogen was used to attain a 70 Q Foam Frac. ISIP was 1710 lbs.

2nd stage 5/20/91

70 Q Foam Frac - Coal Formation

Shot 10 .34 holes from 1352 to 1400 and broke down with 28% HCL acid at a pressure of 1450 lbs. Ran 35 sacks of 20/40 mesh sand at an averge rate of 23 BPM and an average pressure of 3741 lbs. A total of 405,000 scf of Nitrogen was used to attain a 70 Q Foam Frac. ISIP was 2100 lbs.

IV-35
(Rev 8-81)

APR 11 1983
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Date March 18, 1983
Operator's
Well No. 1
Farm James Yoho
API No. 47 - 103 - 1275

State of West Virginia
Department of Mines
Oil and Gas Division

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

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

LOCATION: Elevation: 859 KB Watershed Fishing Creek
District: Green County Wetzel Quadrangle Porters Falls 7.5 mir

COMPANY The Coastal Corporation
ADDRESS 3501 Emerson Ave., Parkersburg, WV
DESIGNATED AGENT William Carpenter
ADDRESS 3501 Emerson Ave., Parkersburg, WV
SURFACE OWNER James Yoho
ADDRESS Box 665, New Martensville, WV 26155
MINERAL RIGHTS OWNER (see attached sheet)
ADDRESS (see attached sheet)
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowthe ADDRESS Middlebourne, WV
PERMIT ISSUED
DRILLING COMMENCED 1/06/83
DRILLING COMPLETED 1/10/83
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON n/a

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	40'	40'	driven
9 5/8			
8 5/8	1078	1078	to surface
7			
5 1/2			
4 1/2	3567	3567	950'±
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Warren sandstone Depth 3600 feet
Depth of completed well 3999' feet Rotary X / Cable Tools ___
Water strata depth: Fresh n/a feet; Salt 1255 feet
Coal seam depths: n/a Is coal being mined in the area? no

OPEN FLOW DATA
Producing formation Warren sandstone Pay zone depth 3430-3446 ~~3415-3452~~ feet
Gas: Initial open flow 300 Mcf/d Oil: Initial open flow trace Bbl/d
Final open flow (100) Mcf/d Final open flow (3) Bbl/d
Time of open flow between initial and final tests ___ hours
Static rock pressure 600 psig (surface measurement) after 24 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 Oil: 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

APR 18 1983

(Continue on reverse side)

FORM IV-35
(REVERSE)

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

Perforation: Based upon GR/cement Bond Log
10 holes 3430-3436 Warren
9 holes 3442-3446 sandstone
(.49 tru-jets)

Frac Summary: Foam/Nitogen completion with 10,0001bs 20-40 mesh sand, 625,000 scf of nitrogen, and 250 bbls of fluid.
ISIP = 1800 psi

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Permian and Pennsylvanian	surface	1078	dry
sandstone, siltstone, shale	1078	1255	
First Salt sand	1255	1266	dry
limestone, siltstone, shale	1266	1450	
Second Salt sand	1450	1534	dry
shale	1534	1564	
Third Salt sand	1564	1640	dry
shale and siltstone	1640	1700	
Maxton sandstone	1700	1782	no shows
shale and siltstone	1782	1830	
Greenbriar limestone	1830	1940	hard, sandy in bottom, Trace H_2O
shale	1940	1943	
Big Injun sandstone	1943	2127	no shows
shale and siltstone	2127	2235	
Weir sandstone	2235	2360	sli show gas, oil fluor. in samples
shale and siltstone	2360	2480	
Berea sandstone	2480	2497	no sand development, no shows
siltstone and shale Tr sand stone	2497	3415	no shows
Warren sandstone	3415	3452	sli show gas, trace oil fluor in samples
siltstone and shale	3452	3999	no shows
			T. D. Driller 4007'
			T. D. Logger 3999'

4007
2497
1510

(Attach separate sheets as necessary)

The Costal Corporation
Well Operator

By: Benjamin Smelter

Date: March 18, 1983

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 [illegible] encountered in the drilling of a well."

Wet 1275

OILFIELD SPECIALISTS, INC.
Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

January 12, 1983

William Carpenter, President
The Coastal Corporation
3501 Emerson Ave., Suite 4B
Parkersburg, W. Va. 26104

Re: Leland-Yoho #1 well in Green District, Wetzel County.

Dear Sir:

Following is a summary of operations conducted on the Yoho #1 well to date, an electric-log analysis and completion recommendations:

Drilling Summary

1/6/83 Moved in rotary, spud conductor hole around 4pm, set 40' of 11 3/4" conductor pipe.

1/7/83 Began drilling surface hole around 2am, 955' around 6pm, set 1078' ± of 8 5/8" surface casing, cemented back to surface, plug down around 11:30pm.

1/8/83 Drilling at 1283' around 12:30pm.

1/9/83 Drilling 2750' around 3pm, dusting, 3500' around 11pm, carrying slight amount of gas.

1/10/83 T.D. 4007' around 5am, logging with Allegheny around 9am, 3567' of 4½" casing run by 4:30, cemented with 150 sks class with 12lb/sk Gilsonite and 300 sks 50-50 Poz with 10% Salt and 2% Cacl, plug down by 6:30pm, slight show of gas.

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Marietta, Ohio 45750
(614) 374-2123

Log Analysis

Upon reviewal of the electric logs, two reservoirs appear to have economic potential, the Warren Siltstone and the Weir Sandstone. Following is a summary of each reservoir.

A. Warren Siltstone (3416' - 3452') Devonian

1. 14 feet of greater than 8 percent (8%) porosity.
2. 16 feet of greater than 50 ohms resistivity.
3. Average water saturations of 32 percent (32%) in the productive interval.
4. Average hydrocarbon saturations of 68 percent (68%) in the productive interval.
5. Definite temperature anomaly in the interval.
6. Good odor in samples throughout the interval.
7. Trace oil fluoressence in the samples.

B. Weir Sandstone (2235' - 2360') Mississippian

1. 55 feet of greater than 8 percent (8%) porosity, 32' of greater than 10 percent (10%) porosity.
2. 18 feet of greater than 50 ohms resistivity, 6 feet of greater than 60 ohms resistivity.
3. Average water saturations of 24 percent (24%) in the productive interval.
4. Average hydrocarbon saturations of 76 percent (76%) in the productive interval.

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Marietta, Ohio 45750
(614) 374-2123

5. Very slight temperature anomalies through the interval.

6. No sample analysis due to missing samples.

Completion Recommendations

Based upon the preceeding technical summaries I feel both the Warren and Weir reservoirs should be tested. Initially, the Warren should be completed with a low water volume completion type, such as foam or gelled foam. Utilization of this type of completion would enable propping of the reservoir while at the same time preventing potential formation damage to water sensitive shales.

Following are the recommended perforations for the Warren Siltstone:

3424, 25, 26, 26.5, 27, 27.5, 28, 28.5, 29, 30	10
3436, 37, 37.5, 38, 38.5, 39, 39.5, 40	8
	18 total holes
	* (.49 true -jets)

Summary

Due to the apparent absence of productive Berea and Fifty Feet reservoirs on the northern portion of the acreage block, testing of the Warren and Weir intervals for commercial productivity becomes highly important. Based on electric-log data and sample information both intervals appear to be commercially attractive. Caution must be excercised in completing

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Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

these reservoirs so as to prevent formation damage, and reliable test data must be obtained from each reservoir so that an insight is gained for future drilling programs.

Sincerely yours,

Benjamin Smeltzer

Benjamin Smeltzer

Geologist, O.S.I.

Wet 12K

OILFIELD SPECIALISTS, INC.
Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

DR. HOLEMAN
RAY GREER
FLOGLE
MORT
MAX
FILE

February 20, 1983

William Carpenter, President
3501 Emerson Ave., Suite 4B
Parkersburg, West Virginia 26102

Re: Reserve Estimates for the
Leland-Yoho #1

Dear Sir:

Enclosed are estimates of recoverable reserves from productive intervals contained within the Leland-Yoho #1 well located in Green district of Wetzel county, West Virginia.

The projected reserves are based entirely upon electric-log and volumetric data. The Warren interval has been completed, but no concrete production data could be utilized for this report.

The formulas used to calculate the reserve projections are standard formulas used throughout the Petroleum Industry, and are listed below:

Oil: $$\text{BBLS/ACRE} = \frac{(7758)\ (\emptyset)\ (H)\ (So)}{\text{FV Oil Factor}}$$

Gas: $$\text{MCF/ACRE} = (43.6)\ (\emptyset)\ (SG)\left(\frac{Rp}{14.7}\right)\left(\frac{460 + Ta}{460 + Tr}\right)\left(\frac{1}{Z}\right)\ (H)$$

Where:
- $\emptyset$ = porosity
- H = net reservoir thickness
- So = avg. oil saturation
- SG = avg. gas saturation
- Rp = reservoir pressure (assumed)
- Ta = absolute temperature
- Tr = reservoir temperature
- Z = gas compressibility factor

- -

- A = acreage drained
- Rf = recoverability factor

The results of the reserve analysis for the Leland-Yoho #1 are summarized below:

OILFIELD SPECIALISTS, INC.
Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

Reservoir	Depth	Ø	SG	SO	SW	H	A	Rf	Est. Recoverable Reserv Gas(MCF)	Oil (BBLS)
Big Injun	2038'	.095	.52	.01	.47	56'	20	.75	78,697	5,159
Weir	2278'	.113	.62	.11	.27	54'	20	.75	143,481	65,091
Warren	3423'	.08	.60	.03	.37	15'	20	.75	35,532	3,491
								Totals	257,710	73,741

On the basis of these calculations, the Weir appears to be the most commercially productive interval.

It must be emphaized that these estimates are in no way guaranteed, and are subject to adjustment based on changes in well preformance, prices, costs, taxes, or other changes that affect the profitability of production operations.

Further, it must be stated that neither O.S.I. nor any of O.S.I.'s employees have any interest in the subject well, nor is compensation for this study contingent upon the projected estimates.

All data used in this study is available for your examination at our office in Marietta, Ohio.

Thank your for considering Oilfield Specialists, Inc.

Sincerely yours,

Benjamin Smeltzer

Benjamin S. Smeltzer
Geologist, O.S.I.

BSS/cav

OILFIELD SPECIALISTS, INC.
Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

CC: DR. HOLMEN
RAY GREER
DOYL FLUGLE
MORT SCHAFF
MAX BECKER
FILE

April 8, 1983

William Carpenter, President
3501 Emerson Ave., Suite 4B
Parkersburg, West Virginia 26102

Re: Reserve Estimates for the
Leland-Yoho #1

REVISED!

Dear Sir:

Enclosed are estimates of recoverable reserves from productive intervals contained within the Leland-Yoho #1 well located in Green district of Wetzel county, West Virginia.

The projected reserves are based entirely upon electric-log and volumetric data.

The formulas used to calculate the reserve projections are standard formulas used throughout the Petroleum Industry, and are listed below:

GAS

$$\text{MCF Gas In Place/Acre} = 43.6 \times \emptyset \times S_G \times \frac{PSIF}{PSIA} \times \frac{460 + T_A}{460 + T_F} \times \frac{1}{Z} \times h$$

43.6 = MCF at atmospheric pressure and temperature that can be contained in a volume of 1 ft. x 1 acre of 100% void space.

$\emptyset$ = Decimal equivalent of porosity.

h = Net pay thickness in feet.

S_G = Decimal equivalent of gas saturation.

PSIF = Formation pressure in psi.

PSIA = Atmospheric pressure in psi.

T_A = Atmospheric temperature ^oF.

T_F = Formation temperature ^oF.

Z = Compressibility of the gas.

OIL

$$\text{BBLS of Oil In Place/Acre} = \frac{7758 \times \emptyset \times h \times So}{FVF}$$

7758 = Barrels of oil that can be contained in 1 ft. x 1 acre of 100% void space.

OILFIELD SPECIALISTS, INC.
Rt. 4 Box 392
Marietta, Ohio 45750
(614) 374-2123

Ø = Decimal equivalent of porosity.

h = Net pay thickness in feet.

So = Decimal equivalent of oil saturation.

FVF = Formation volume factor of oil.

- -

A = acreage drained (20 acres)

Rf = recoverability factor (primary production, 25% oil, 50% gas)

The results of the reserve analysis for the Leland-Yoho #1 are summarized below:

Reservoir	Depth	Ø	SG	SO	SW	H	A	Est. Recoverable Reserves Gas (MMCF)	Oil (BBLS)
Big Injun	2038'	.095	.52	.01	.47	56'	20	52,465	1,719.60
Weir	2278'	.113	.62	.11	.27	54'	20	95,654	21,697.19
Warren	3423'	.08	.60	.03	.37	15'	20	23,688	1,163.70
						TOTALS		171,807	24,580.49

On the basis of these calculations, the Weir appears to be the most productive interval.

It must be emphaized that these estimates are in no way guaranteed, and are subject to adjustment based on changes in well preformance, prices, costs, taxes, or oher changes that affect the profitability of production operations.

Further, it must be stated that neither O.S.I. nor any of O.S.I.'s employees have any interest in the subject well, nor is compensation for this study contingent upon the projected estimates.

All data used in this study is available for your examination at our office in Marietta, Ohio.

Sincerely yours,

Benjamin Smeltzer

Benjamin Smeltzer
Geologist, O.S.I.

THE COASTAL CORPORATION

Yoho #1
Green District, Wetzel County

Sample Descriptions

Warren Descriptions

3350-3380	80% Sh	Lt-med gy, micaeous, slty in part, pyritic, sft-sli frm chips.
	20% Slst	Lt-tangy, vfgr, tr calc cement, no fluor.
3380-3410	80% Sh	Lt-med gy, smooth textured, vslty, micaeous, Pyritic, sft chips.
	20% Slst	Cloudy clr-tangy, vfst, silaceous, sft-sli frm chips, argillaceous, no fluor, no odor.
3410-40	75% Sh	Lt-med gy-grnshgy, smooth textured-sli slty, micaeous, pyritic.
	25% Slst	Cloudy gy-tangy, vfgr, calc in part, + calc content then previous sample, no fluor.
3440-70	70% Sh	G/G, huy trace red shale, vsft chips.
	30% Slst	Cloudy gy-grnsh clr gy-tangy, vfgr, sli calc-mostly silaceous, vargillaceous, frm chips, no fluor, no odor.
3470-3500	60% Slst	Cloudy lt gy-tangy-pink, vfgr, silaceous, clean-vargillaceous, sft-sli frm chips, tr fluor in sample, good odor in sample.
	40% Sh	A/A lt-med gy-grngy, sft, sli slty sft, sli-fair odor in sample.

3500-30	60% Sh	Lt-gy-grnshgy-lt gy frn, smooth textured, sli slty, sft-sli frm, pyritic in part.
	40% Slst	Cloudy gy-tan-pink, vfgr, silaceous-sli calcareous, sft-sli frm chips, no oil fluoressence.
3530-60	70% Slst	Cloudy clr-gy, tan, pink-red, vfgr, sft frm chips, sli calcareous, sli argillaceous, fair-good odor. Tr fluor in cample.
	30% Sh	Lt-med gy, a/a
3560-90	80% Sh	A/A.
	20% Slst	A/A.
3590-3620	80% Sh	A/A.
	20% Slst	A/A.

103-1275 F

FORM WW-2B

Page ___ of ____

Issued 3/29/91

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

Expires 3/29/93

4568

1) Well Operator: Pardee Gas Company 3688(5) 553

2) Operator's Well Number: Leland/Yoho #1 3) Elevation: 848.9

4) Well type: (a) Oil __/ or Gas X/

(b) If Gas: Production X/ Underground Storage __/
Deep __/ Shallow X/

003

5) Proposed Target Formation(s): coal bed

6) Proposed Total Depth: 1800' feet

7) Approximate fresh water strata depths: N/A

8) Approximate salt water depths: N/A

9) Approximate coal seam depths: 1352-56, 1400-04, 1512-14, 1598-1600, 1626-28
1636-38'

10) Does land contain coal seams tributary to active mine? Yes ___/ No X/

11) Proposed Well Work: Refrac

12) Temporary Bridge Frac New FORMATION

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4	ERW		40'	40'	CTS
Fresh Water						
Coal						
Intermediate	8 5/8	ERW	20#	1078'	1078'	CTS
Production	4 1/2	ERW	10.5	3567'	3567'	by rule 38 CSR 18.11-1
Tubing						950'
Liners						

RECEIVED
Division of Energy
MAR 18 91
Permitting
Oil and Gas Section

PACKERS : Kind Retrievable bridge plug
Sizes 4 1/2
Depths set 1800'

2661 8

For Divison of Oil and Gas Use Only

	Fee(s) paid:		Well Work Permit		Reclamation Fund		WPCP		
	Plat		WW-9		WW-2B		Bond	Blanket	Agent

(Type)

Page 1 of ____
Form WW2-A
(09/87)

1) Date: _____
2) Operator's well number
Leland/Yoho #1
3) API Well No: 47 - 103 - 1275-FRAC
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

RECEIVED
Department of Energy
MAR 18 91

4) Surface Owner(s) to be served:
(a) Name James Yoho
Address Box 665
New Martinsville, WV 26155
(b) Name _____
Address _____
(c) Name _____
Address _____

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

6) Inspector Donald Ellis
Address 2604 Crab Apple Lande
Fairmont, WV 26554
Telephone (304)-534-5596/366-5880

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
____ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties, by:

____ Personal Service (Affidavit attached)
____ Certified Mail (Postmarked postal receipt attached)
____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.

Well Operator Pardee Gas Company
By: Charles M. Davis
Its: Operations Manager
Address P O Box 4119
Parkersburg, WV 26104
Telephone 304-428-3471

Subscribed and sworn before me this 26 day of February, 19 91

Debra Lynn Mason
Notary Public

My commission expires May 24, 1999

WR-38
22-May-95

Environmental Protection

NOV 0 6 1995

Permitting
Office of Oil & Gas

API # 47-103-01275-P

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: YOHO, JAMES Operator Well No.:YOHO #1

LOCATION: Elevation: 848.90 Quadrangle: PORTERS FALLS
District: GREEN County: WETZEL
Latitude: 10400 Feet South of 39 Deg. 37 Min. 30 Sec.
Longitude 9200 Feet West of 80 Deg. 47 Min. 30 Sec.

Well Type: OIL _____ GAS X

Company: PARDEE EXPLORATION
1331 LAMAR SUITE 555
HOUSTON, TX 77010-000

Coal Operator or Owner _____

Agent: GEORGE D. CURTIN

Coal Operator or Owner _____

Permit Issued: 05/22/95

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of WOOD ss:

JOHN W. CUSHING and DONALD M. COE being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and RANDALL MICK Oil and Gas Inspector representing the Director, say that said work was commenced on the 5 day of JUNE, 1995, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
CLASS A CEMENT	1750	1300	0	450
GEL	1300	944	0	356
CLASS A CEMENT	944	844	894	50
GEL	844	80	-	0
CLASS A CEMENT	80	SURFACE	-	0

11/6/95

API# ON MONUMENT

Description of monument: 7"CASING-BURIED 6'IN GROUND-2'ABOVE GROUND
and that the work of plugging and filling said well was completed on the 5 day of JUNE, 1995.

And furthur deponents saith not.

Donald M. Coe

John Cushing

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
BRENDA J. HARRIS
4017 - 5th Ave., Vienna, WV. 26105
My Commission Expires June 4, 1996.

Sworn and subscribed before me this 17th day of October, 1995

Brenda J. Harris
Notary Public

My commission expires: June 4, 1996

NOV 13 1995

Oil and Gas Inspector: Randall Mick

RANDALL MICK

Yoho #1 (#3 worst of 9)

Warren - Poor! - 5 MCFPD

Reserves

257,710 MCF

43,741 BBL

Prod	Lay
Soap well	1
30 MCF	2
10 MCF	3
Zero	4
Soap well	1
30 MCF	2
10 MCF	3
Zero	4
Soap	1