

LEGEND

- — Lines plotted from deed calls
- — Surveyed Lines
- - - - Roads
- o Well Location

OWNERSHIP

No coal in this area
 Property is owned in fee by
 Olin Primm, Rural Route,
 West Union

Minimum Error of Closure 1 in 200'

Source of Elevation USGS elev. at forks of road 3400' SW = 868

- 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: [Signature]
 Squares: N S E W

Map No. _____

Compan Meridian Exploration Corporation
 Address 707 Grant St, Ste 2800, Pittsburgh, Pa.

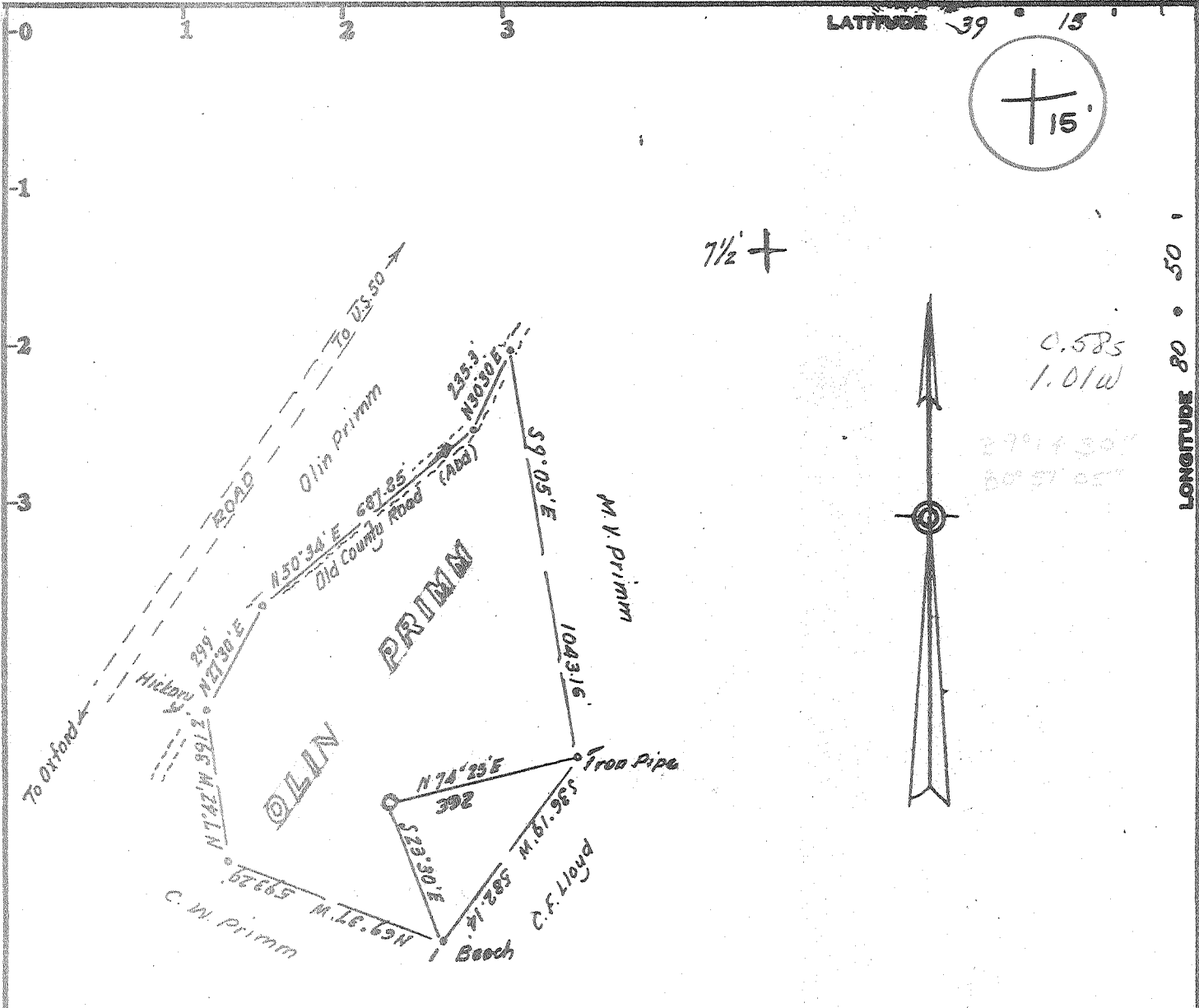
STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL & GAS
 NITRO, WEST VIRGINIA 25143

Farm Olin E. Primm
 Tract _____ Acres 19.34 Lease No. _____
 Well (Farm) No. One Serial No. _____
 Elevation (Spirit Level) 1042
 Quadrangle Oxford 7 1/2 Holl.
 County Doddridge District Central
 Engineer [Signature]
 Eng's Registration No. 1227
 File No. _____ Drawing No. _____
 Date July 31, 1979 Scale 1" = 400'

WELL LOCATION MAP

Oil Well No. 47-017-2464
Temp Plus Frac Riley-Balltown Commf
 + Denotes location of well on United States Topographic Maps, scale 1 to ^{24,000}/_{62,500}, latitude and longitude lines being represented by border lines as shown.
 — Denotes one inch spaces on border line of original tracing.

8/7/79



LEGEND

- Lines plotted from dead calls
- Surveyed Lines
- - - Roads
- Well Location

OWNERSHIP

No coal in this area.
 Property is owned in fee by
 Olin Primm, Rural Route,
 West Union

Minimum Error of Closure 1 in 200

Source of Elevation USGS elev. at forks of road 3400' SW - 868

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.

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

Map No.

Signed: Matthew J. [Signature]
 Squares: N S E W

Company CHASE PETROLEUM CORP
 Address P.O. Box 797, Glenville, W.Va
 Farm Olin E Primm
 Tract _____ Acres 19.34 Lease No. _____
 Well (Farm) No. One Serial No. _____
 Elevation (Spirit Level) 1042 NC
 Quadrangle Oxford 7 1/2 (HOLBROOK 15)
 County Doddridge District Central
 Engineer Matthew J. [Signature]
 Engrs Registration No. 1227
 File No. _____ Drawing No. _____
 Date July 31, 1979 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. 47-017-2464

+ Denotes location of well on United States Topographic Maps, scale 1 to ^{24,000}/_{62,500}, latitude and longitude lines being represented by border lines as shown. AUG 13 1979

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

MAR 01 1996

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

Permitting
 Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: PRIMM, OLIN

Operator Well No.: 1517

LOCATION: Elevation: 1,042.00 Quadrangle: OXFORD

District: CENTRAL County: DODDRIDGE
 Latitude: 3150 Feet South of 39 Deg. 15Min. 0 Sec.
 Longitude 5420 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: MERIDIAN EXPLORATION CORP
 707 GRANT STREET SUITE 2800
 PITTSBURGH, PA 15219-0000

Agent: JOHN O. KIZER (C T CORP)

Inspector: MIKE UNDERWOOD
 Permit Issued: 10/11/95
 Well work Commenced: 12/12/95
 Well work Completed: 1/10/96
 Verbal Plugging _____
 Permission granted on: _____
 Rotary Cable _____ Rig _____
 Total Depth (feet) 5490'
 Fresh water depths (ft) 50'

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N
 Coal Depths (ft): N/A

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	20	0	
8 5/8"	1623	1623	CTS
4 1/2"	5404	5404	1800'
2"		5100'	

OPEN FLOW DATA

Producing formation Riley Pay zone depth (ft) 4218-4222
 Gas: Initial open flow 800 MCF/d Oil: Initial open flow - Bbl/d
 Final open flow 800 MCF/d Final open flow - Bbl/d
 Time of open flow between initial and final tests - Hours
 Static rock Pressure 700 psig (surface pressure) after 24 Hours

Second producing formation Balltown Pay zone depth (ft) 3988-3998
 Gas: Initial open flow 800 MCF/d Oil: Initial open flow - Bbl/d
 Final open flow 800 MCF/d Final open flow - Bbl/d
 Time of open flow between initial and final tests - Hours
 Static rock Pressure 700 psig (surface pressure) after 24 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: MERIDIAN EXPLORATION CORP.
 By: John Guide
 Date: 2/27/96

MAR 2 1996

Ziley:

Perforation Interval: 4218' - 4222' + 4242' - 4252'
4 shots per foot
90° phasing

Fracture Treatment: 11,500 lbs 20/40
Cross Link Gel
500 gal 15% HCl
No Nitrogen
Final pressure: 1500 psi

Balltown

Perforation Interval: 3988' - 3998' + 4068' - 4078'
4 shots per foot
90° phasing

Fracture Treatment: 30,000 lbs 20/40
Cross Link Gel
500 Gal 15% HCl
No Nitrogen
Final pressure: 2,000 psi

JUN 11 1980

WELL OPERATOR'S REPORT
OF

Operator's Well No. Primm #2
API Well No. 47-017-2464
State County Permit

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE
OIL & GAS DIVISION

DEPT. OF MINES

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow)
Elevation: 1042 Watershed: Cabin Run
District: Central County: Doddridge Quadrangle: Oxford 7-1/2

WELL OPERATOR Chase Petroleum DESIGNATED AGENT Alton Skinner
Address P.O. Drawer 369 Address P.O. Box 297
Glenville, WV, 26351 Glenville, WV, 26351

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

PERMIT ISSUED ON 8/7/, 1979 OIL & GAS INSPECTOR FOR THIS WORK:
Name Paul Garrett
Address Clarksburg, WV, 26301

LOGICAL TARGET FORMATION: Alexander Depth 5394 feet
Depth of completed well, 5490 feet Rotary / Cable Tools
Water strata depth: Fresh, 50 feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced 9/22, 1979, and completed 9/27, 1979

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-IN OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	11				x	20	-0-		Kinds
Production	8-5/8		23#	x		1623	1623	CTS	Sizes
Production	4-1/2		10.5#	x		5404	5404	3656	Depths set
									Perforations:
									Top Bottom

FLOW DATA

Producing formation Alexander Pay zone depth 5285 feet
Gas: Initial open flow, 300 Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 300 Mcf/d Final open flow, _____ Bbl/d
600 MCF Time of open flow between initial and final tests, 10 hours
Static rock pressure, 1400 psig (surface measurement) after 24 hours shut in
[If applicable due to multiple completion--]

Second producing formation 1st Elk & Benson Pay zone depth 5013-15 feet
Gas: Initial open flow, 300 Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 300 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 10 hours
Static rock pressure, 1400 psig (surface measurement) after 24 hours shut in

JUL 16 1980

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

Fraced Alexander 5285-5334 15 Holes 715 Bbls. total fluid 50,000# 20/40

Fraced 1st Elk & Benson 4845-48 8 holes 514 Bb. total fluid 30,000 # 20/40
 3013-15 6 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
K B G.L.			0	11	
Cond			11	29	
Shale, Sandy Shale			29	35	
R.R. & Shale			35	60	
Sand			60	65	
Shale			65	100	
Sand			100	105	
Shale & RR			105	130	
Sand			130	160	
RR & Shale			160	180	
Sand			180	215	
Sandy Shale			215	240	
Sand			240	245	
Sandy Shale			245	265	
RR & Shale			265	270	
Sandy shale			270	295	
Shale & RR.			295	325	
Sandy Shale			325	350	
RR & Shale			350	364	
Sandy Shale			364	390	
RR & Shale			390	425	
Sandy Shale & RR.			425	662	
Sand			662	765	
Sandy Shale			765	784	
Coal			784	790	
Shale			790	1045	
Sand			1045	1092	
RR & Shale			1092	1160	
Sandy Shale			1160	1200	
Shale			1200	1270	
Sand			1270	1280	
Shale			1280	1317	
Sand			1317	1320	
Sandy Shale			1320	1375	
Sand			1375	1400	
Sandy Shale			1400	1505	
Sand & Shale			1505	1550	

(attach separate sheets to complete as necessary)

Chase Petroleum

Well Operator

Alton Skinner

Pres.

NOTE: Regulation 8.01(f) provides as follows:

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

Shale	1550	1565
Sand	1565	1595
Sandy Shale	1595	1615
Sand	1615	1675
Sandy Shale	1675	1930
Sand	1930	1955
Shale	1955	1962
Sandy Shale	1962	1980
Shale	1980	1995
Sand & Shale	1995	2025
Big Lime & Sand	2025	2190
Sandy Shale	2190	5010
Sand	5010	5020
Sandy Shale	5020	5215
<u>Alexander.</u>	5215	5330
Sandy Shale	5330	5490 TD

JUL 16 1980

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's 2
Well No. _____
API Well No. 47 - 017 - 2464
State County Permit

WELL TYPE: Oil ___ / Gas X /
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X /)
LOCATION: Elevation: 1042 Watershed: Cabin Run
District: Central County: Doddridge Quadrangle: Oxford 7-1/2

WELL OPERATOR Chase Petroleum
Address P.O. Box 297
Glennville, W.Va. 26351

DESIGNATED AGENT Alton Skinner
Address Glennville, W.Va. 26351

OIL & GAS ROYALTY OWNER Olin Primm
Address Oxford, W.Va.

COAL OPERATOR None
Address _____

ACREAGE 20
SURFACE OWNER Olin Primm
Address Oxford, W.Va.
ACREAGE 20

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Olin Primm
Address Oxford, W.Va.

FIELD SALE (IF MADE) TO:
Name Not Committed
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____
AUG 6 1979

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address Clarksburg, W.Va.

OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease X / other contract ___ / dated 7/21, 1979, to the undersigned well operator from Olin Primm

If said deed, lease, or other contract has been recorded:]
Recorded on 7/23, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 109 at page 383. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper ___ / Redrill ___ / Fracture or stimulate X /
Plug off old formation ___ / Perforate new formation ___ /
Other physical change in well (specify) None

--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 objection 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 GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-2000

Chase Petroleum
Well Operator
By Alton Skinner
Its Owner - Agent

BLANKET BOND

[08-78]

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) S. W. Jack Drilling Co.

Address Buckhannon, W.Va.

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5394 feet Rotary / Cable tools

Approximate water strata depths: Fresh, 20 feet; salt, 343 feet.

Approximate coal seam depths: 486-489 Is coal being mined in the area? Yes / No

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	Left in well		
Conductor	12"				X	40'	40'		Kinds
Fresh water	12'					40'	40'		
Coal	8-5/8		23.5	X		1785'	1785'		Slips
Intermediate	8-5/8		23.5	X		1785'	1785'	Cts	
Production	4-1/2		10.5	X		5352'	5352'	2100	Depths set
Tubing									
Liners									Perforations:
									To: Bottom:

Regulation 2.02 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 drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where such 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.

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 4-7-80.

[Signature]
Deputy Director - Oil & Gas Division

The following order must be completed by the coal operator and by any coal owner or coal 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 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.

By _____
Its _____

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Meridian Exploration Corp. (31805) (1) 526

2) Operator's Well Number: 1517 3) Elevation: 1042'

4) Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow ___ /

Issued 10/11/95
Expires 10/11/97

Proposed Target Formation(s): Riley - 4250' + Balltown - 4,000'

Proposed Total Depth: 5490' feet

Approximate fresh water strata depths: 50'

Approximate salt water depths: None Encountered

Approximate coal seam depths: None Encountered

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

11) Proposed Well Work: Balltown. Remove plug set temp plug @ 4350' Frac Riley and

12)

CASING AND TUBING PROGRAM *existing well*

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	11 3/4"			20'	0	-
Fresh Water						
Coal	8 5/8"		23	1,623'	1,623'	amt to surface
Intermediate						
Production	4 1/2"		10.5	5,404'	5,404'	Est top of cm+ @ 3650'
Tubing						
Liners						

PACKERS : Kind N/A
Sizes _____
Depths set _____

For Office of Oil and Gas Use Only

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

RECEIVED
WV Division of
Environmental Protection
SEP 18 1995
Permitting
Office of Oil & Gas

Page 1 of _____
Form WW2-A
(09/87)
Permit Copy

Date: 9/13/95
Operator's well number
1517
API Well No: 47 - 017 - 2464 - W
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Olin Primm
Address Rt 1 Box 225
Oxford, WV 26456
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Rt 2 Box 135
Salem WV 26426
Telephone (304)- 782-1943

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name Olin Primm
Address Rt 1 Box 225
Oxford, WV 26456
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

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 Meridian Exploration Corp
By: John Guich
Its: Chief Engineer
Address 707 Grant St Suite 2800
Pittsburgh PA 15219-1919
Telephone 412-471-8181

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
LINDA E. RIFFLE
RT 1 BOX 271-A
WESTON, WV 26452
My Commission Expires 06/26/2003

Subscribed and sworn before me this 13th day of September, 1995

My commission expires December 26, 2000
Linda E. Riffle Notary Public